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RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

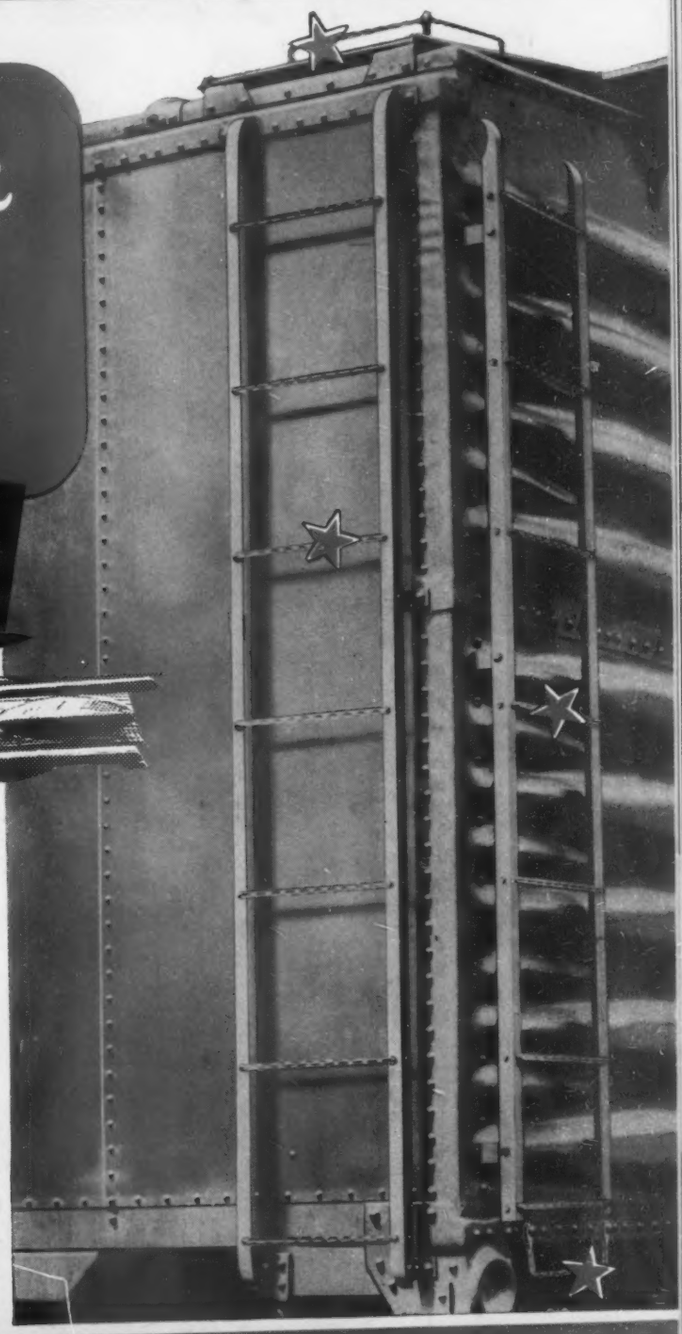
AUGUST 12, 1950

RECEIVED

GREATER All-weather SAFETY for the trainman . . .

WITH THIS GRIP





WINE

"Safe-Grip"

LADDERS and HANDHOLDS

THE WINE RAILWAY APPLIANCE CO. TOLEDO 9, OHIO

We changed from steam to an **Industrial Brownhoist Diesel Crane**

It paid for itself in four years!



Here are the figures to prove it:

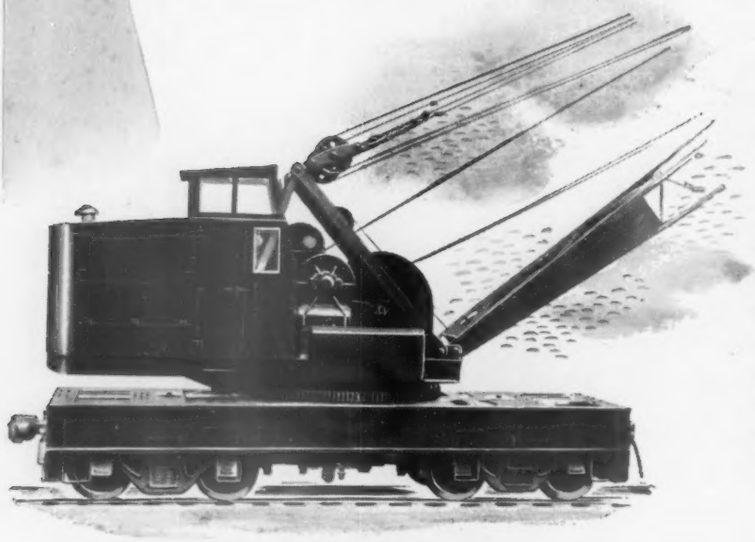
SAVINGS IN FUEL PER DAY $13.40
(Based on 1½ tons coal per day at $10 a ton, against 16 gallons of fuel oil at 10¢ a gallon.)

SAVINGS IN LABOR PER DAY $15.50
(Unproductive firing, banking, cleaning time — 2 hours for engineer at $1.75 per hour, and 8 hours fireman, at $1.50 per hour.)

TOTAL FUEL AND LABOR SAVINGS PER YEAR.. $7,514.00

AND WE INCREASED OPERATING TIME BY 65 DAYS A YEAR!

It takes two hours a day on the average for firing up, banking, taking coal and water, boiler washouts, etc. That figures to 10 hours a week, 520 hours a year, or 65 extra days of productive crane time each year.



BESIDES THESE IMPORTANT EXTRAS:

Safer, cleaner operation; greater production and less operator fatigue because of air operated controls; reduced maintenance time, about one-half that of steam, and elimination of smoke nuisance and fire hazard. Write today for complete information.

BROWNHOIST BUILDS BETTER CRANES . . . with Diesel power



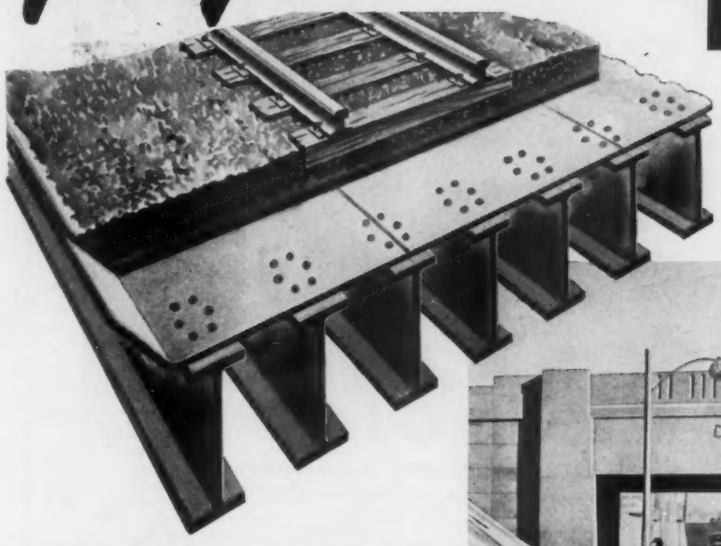
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Mayari R

MAKES ECONOMICAL

BALLAST PLATES





Charleston Underpass is a beam bridge with corrosion-resisting ballast plates of Mayari R low-alloy, high-strength steel. It carries Union Pacific main-line track across U. S. Highway 95 in Nevada.

18 butt-welded Mayari R plates ¾ in. thick and weighing approximately 44 tons were plug-welded to the top flange of the floor beams. General Contractor for the bridge: Olof Nelson Construction Co., Las Vegas. Fabricator and Erector: Bethlehem Pacific Coast Steel Corporation.

Mayari R steel plates support the ballast for Union Pacific main-line track on the Charleston Underpass at Las Vegas, Nevada. These plates, ¾ in. thick, are plug-welded to the top flange of the floor beams and butt-welded to adjacent plates to form a continuous surface.

Mayari R was selected because, in addition to its superior mechanical properties, it has better corrosion-resistance and costs less than most of the other materials commonly used for ballast plate.

Besides applications of this type, Mayari R is also used in coaling stations, blast plates, smoke stacks and hopper cars, as well as in many other railroad structures and items of equipment.

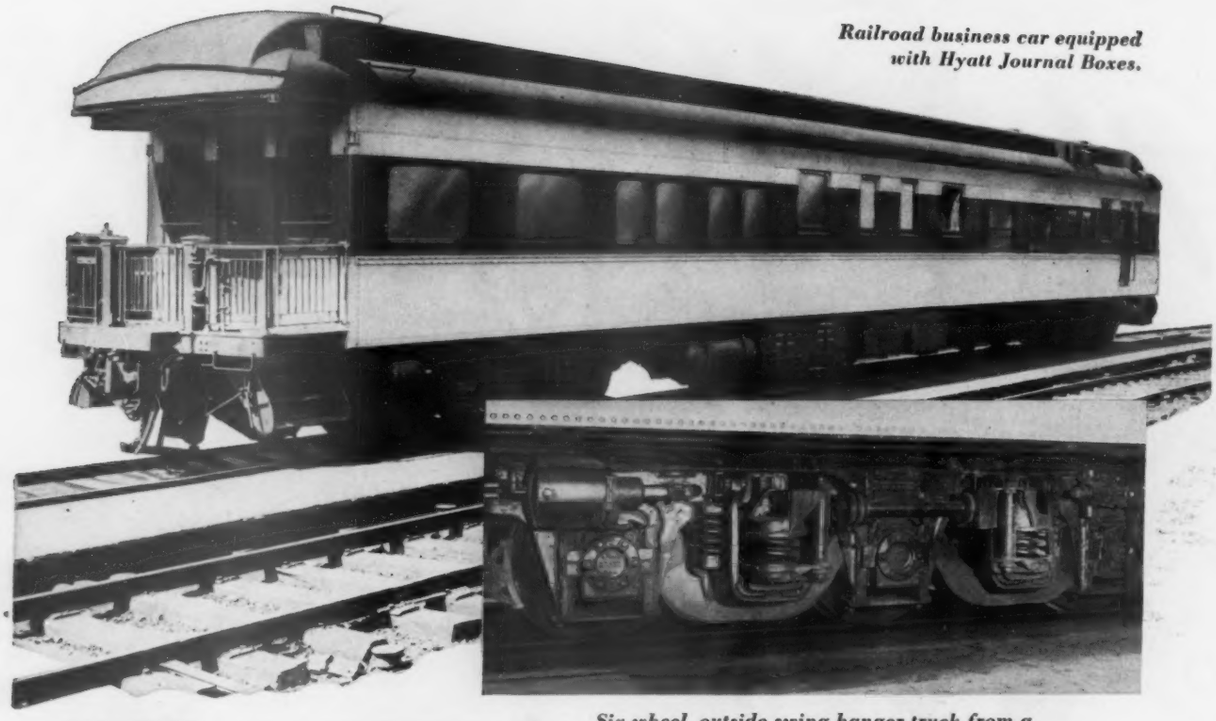
For detailed information on Mayari R, its properties, workability and applications, write or phone for Catalog No. 209.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation. *Export Distributor:* Bethlehem Steel Export Corporation

BETHLEHEM STEEL

Mayari R *makes it lighter... stronger... longer lasting*



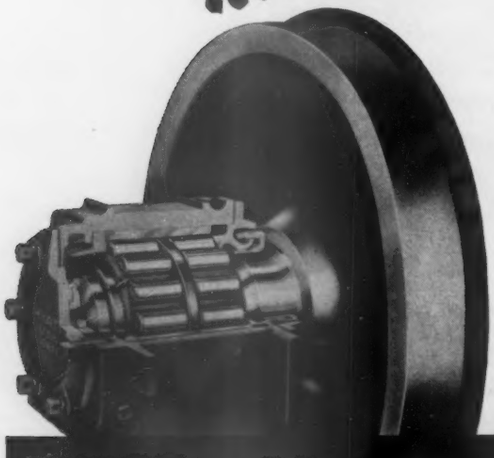
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Six wheel, outside swing hanger truck from a Hyatt-equipped business car.

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On the line or off the line the demands upon their energy is taxing—they must keep fit and be fit.

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Possibly that is one of the many reasons why the mechanical departments have equipped the traveling offices of so many busy executives with Hyatt Roller Bearing Journal Boxes in the past few years.

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Call or write Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.

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Vol. 129, No. 7 August 12, 1950

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CUT COSTS . . . STEP-UP EFFICIENCY with "UNION" C.T.C.

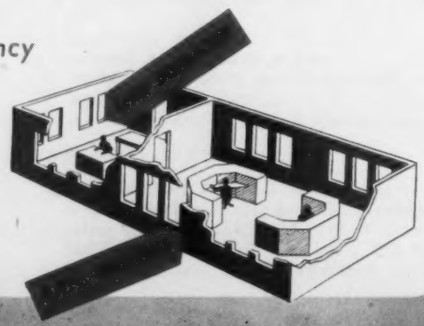
. . . And this applies to multiple, as well as single-track, territories!

IN double track territories, for example, switches can be power-operated with signal control arranged to govern train movements in *both* directions on *both* tracks. Crossovers, under the direct control of the operator, permit trains to pass from one track to the other . . . fast trains can run around slower ones, and both keep moving at normal speeds. When traffic is heavy in one direction, sections of both tracks can be used by trains running in that direction.

With such an arrangement, you can increase your railroad's track capacity . . . eliminate congestion by reducing unnecessary delays, and assure maintenance of fast advertised schedules.

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UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

WEEK AT A GLANCE

NEW RECORD IN SIGHT? Railroad purchases in 1950's first five months, as shown by the summary on pages 53 and 54, fell just short of the billion-dollar mark. By now, of course, they are way over that figure—and with seven months to go since that figure was compiled it is quite possible that total railroad buying for the full year may reach a new all-time dollar high. Straws in the wind? Traffic on a definite upswing; orders for new equipment to cost considerably more than $100 million reported in last week's *Railway Age* alone; the American Railway Car Institute reporting July freight-car orders at the highest monthly level since 1924 (page 72); and the railroads as a whole just committed to perhaps the most comprehensive car-buying program ever undertaken.

"INVALUABLE CONTRIBUTION": Railroad accounting officers can make an "invaluable contribution" toward solution of the freight-rate problem and the difficulties which stem from that "most difficult problem facing the railways today." So Canada's transport minister, Lionel Chevrier, told members of the A.A.R.'s Accounting Division who met last week at Ottawa in a convention which was also marked by addresses by Donald Gordon, president of the Canadian National; A.A.R. Vice-Presidents Bunnell, Henry, and Kelly and Assistant Vice-President Monroe; and Division Chairman Glacy; by professional papers by several accounting officers; by committee reports, and by a 15-manufacturer exhibit of office and accounting machinery. A report of the convention proceedings begins on page 47.

CANADA'S FIRST: The Canadian Pacific's big new St. Luc freight terminal, near Montreal, includes the first hump-retarder classification yard to be built in Canada, and the first to be equipped for push-button switch control. A fully illustrated description of the new facility, which combines the functions of three smaller yards and two enginehouses, begins on page 28.

NEWS HIGHLIGHTS: Baldwin and Lima-Hamilton directors agree on plan for merger.—New $4-million B.&O. tunnel tops long list of construction authorizations and contracts.—U.P. announces big signaling program.—P.R.R. tries out at Cleveland new space-sale system developed by Union Switch & Signal Co.—New York security analysts foresee increase in rail traffic and earnings.—B. A. Dollens succeeds C. R. Osborn, promoted, as general manager of Electro-Motive.—Federal court extends to August 14 injunction against Rock Island strike.—G.N., N.P. and U.P. increase Seattle-Tacoma-Portland passenger service in response to "public demand."—House passes forwarder bill.

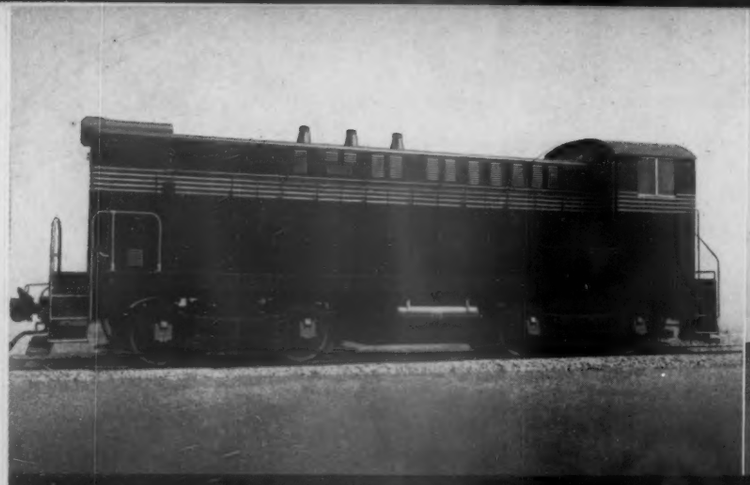
WAYSIDE TREATMENT: By using only four wayside plants for automatic treatment of feedwater for Diesel passenger locomotive steam generators, the Lehigh Valley has cut supervision and maintenance to a minimum and at the same time obtained complete control and regulation of the treatment. How this double result has been achieved with National Aluminate Corporation installations is told on pages 39-41; the article includes a sketch diagram of a typical treating plant layout.

SIX MONTHS' NET TOPS $200 MILLION: Careful control of expenses—doubtless made possible in large part by their huge expenditures for capital improvements—enabled Class I railroads to show a substantially higher net income in the first six months of 1950 than in the corresponding period of 1949, despite somewhat smaller gross revenues. June alone was particularly good, with expenses remaining about on last year's level in the face of higher gross, and with the month's estimated net over 70 per cent above that for June of '49. With car loadings now running well ahead of last year's, 1950 may not be as discouraging a year as it has looked at times. Detailed figures appear in the week's News.

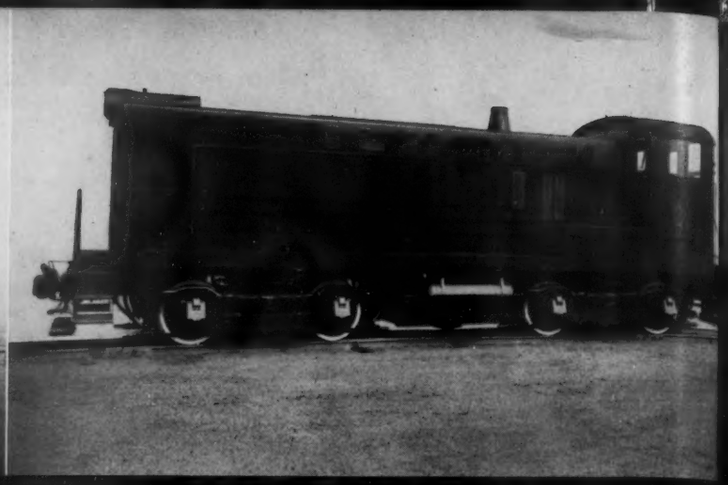
THE SPOILED CHILD VIEWPOINT: Once again this paper commiserates with the railway officers to whom has fallen the wearying assignment of treating in the industry's behalf with the railway unions. Mature adults deserve a better fate than having to give serious attention to the purilities with which the Brethren have assailed the railroad position in support of the Emergency Board decision in the train-service case. Messrs. Hughes and Kennedy have said in effect (see News pages): "Papa Truman, please spank Mr. Railroad. He won't give us any more candy than the doctor told him we should have." Where else outside kindergarten would such an argument be heard? Mr. Truman won't make much progress in restoring life to the moribund Railway Labor Act if he listens to it.

ALCO-G.E. ROAD-SWITCHER: A new design of Diesel-electric road-switcher, incorporating major improvements in electrical equipment, has been announced by the American Locomotive and General Electric Companies. Continuous tractive force of the new unit, at 52,500 lb., is almost 25 per cent greater, for the same gearing, than that of the design which it succeeds. See page 37 for a detailed description.

TRANSPORTATION AND NATIONAL DEFENSE: "Because the railroads have always heretofore performed adequately on short rations does not mean that they can continue indefinitely to produce much from nothing, or next to nothing. . . . The country needs the railroads for military defense . . . . Railroad earnings and credit at a level necessary to provide the funds required for adequate equipment and improvements must, therefore, be made a high-priority item on any realistic program of long-term military preparedness. There is no mystery about the steps needed to restore health to railroad earnings and credit." Our leading editorial, from which the foregoing statements are quoted, details some of those necessary steps.



800-hp. Switching Locomotive.

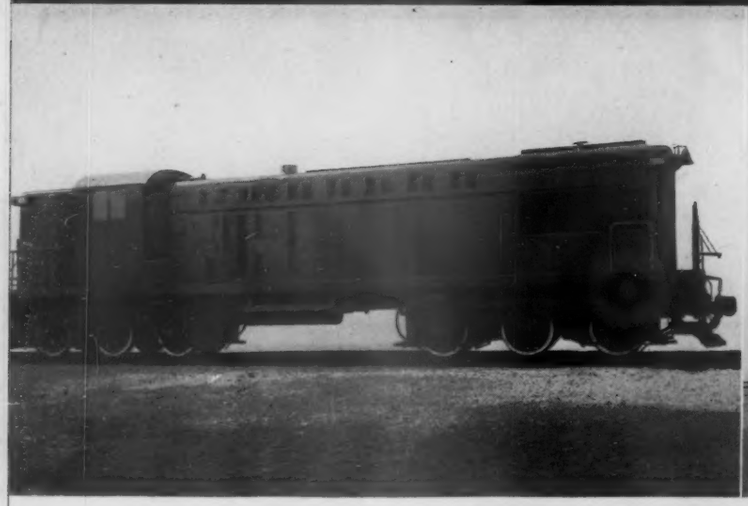


1200-hp. Switching Locomotive.

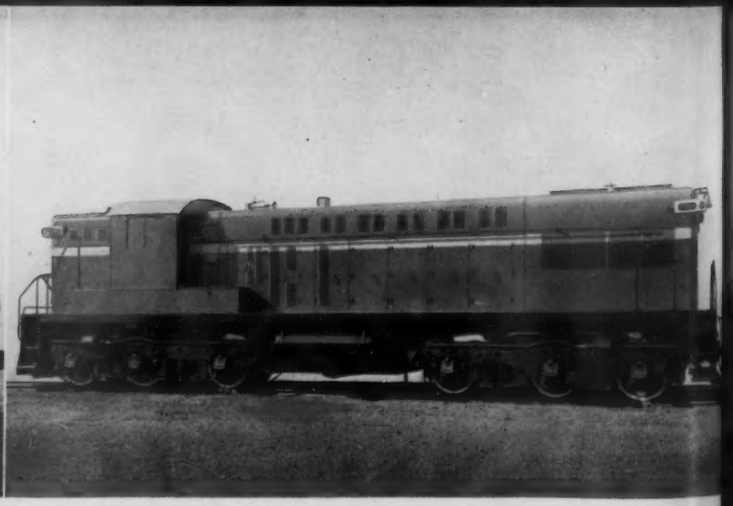
NEW

BALDWIN-Westinghouse Line

offers increased horsepower and tractive effort ratings



1600-hp. All-service Locomotive, 6-wheel trucks, 4 traction motors.



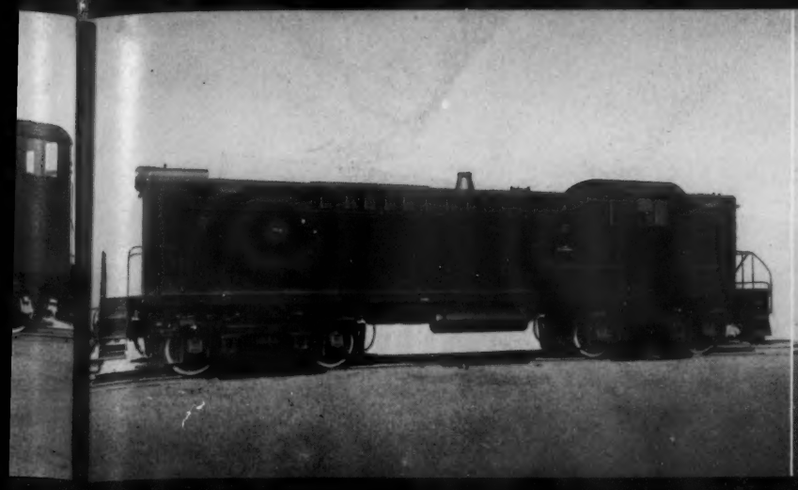
1600-hp. All-service Locomotive, 6-wheel trucks, 6 traction motors.

BLW THE BALDWIN GROUP

WESTINGHOUSE

BALDWIN-Westinghouse

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1200-hp. Road Switching Locomotive.



1600-hp. All-service Locomotive, 4-wheel trucks.

Baldwin-Westinghouse diesel-electric locomotives now offer increased horsepower and tractive effort ratings, resulting in improved performance characteristics in all classes of service. At the same time, interchangeability of parts between older Baldwin-Westinghouse locomotives and the new units has been maintained.

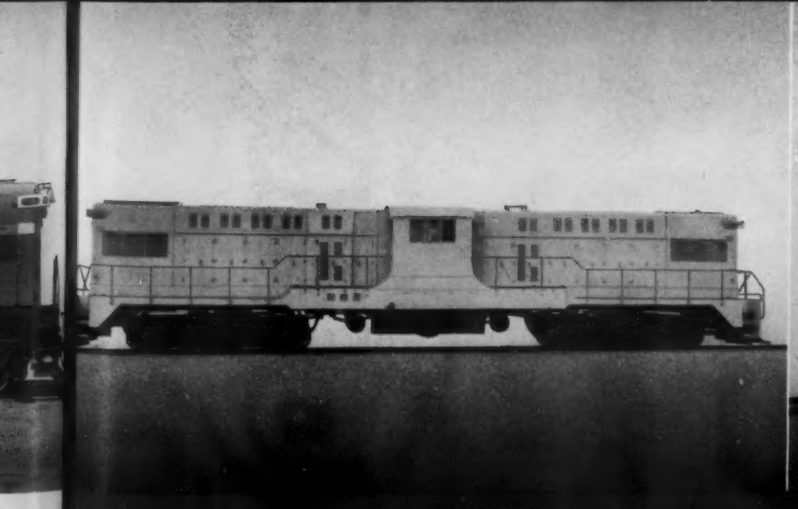
The new standard line includes two 1600-hp and two 1200-hp switching locomotives, eight other 4-axle road trucks and with either 4 or 6 axle trucks a 2400-hp road transfer locomotive, and 1600-hp road units which can be operated in multiple to form 3200-hp, 4800-hp, or 6400-hp locomotives. All ratings represent horsepower available for traction.

Optional gear ratios are offered in the 1600-hp all-service locomotive, the 1600-hp road transfer locomotive, and in the 1600-hp road switcher, permitting a wider latitude in the selection of a type best suited for a particular service.

Our representative will welcome the opportunity to assist you in making this selection.

2400-hp. Road Transfer Locomotive.

6400-hp. Road Locomotive made up of four (4) 1600-hp. units.





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flip a chilled car wheel

and it's heads you win, tails you can't lose.

take the side of initial cost

The cash savings from the lower price of chilled car wheels are especially welcome right now. These savings are realized on *purchase;* help improve current earning statements.

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Tulsa 3, Magneto Ignition Co., 701 West 5th Street

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Pittsburgh 13, Automotive Ignition Co., 6358 Penn Ave.

TENNESSEE
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El Paso, Oakes Battery & Electric Co., 423 Texas Street
Houston 1, Beard & Stone Electric Co., Milam at Polk Street
Houston 11, Magneto & Diesel Injector Service, 6931 Navigation Blvd.

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CANADA
Quebec—Montreal—International Electric Co., 1037 Bleury St.
British Columbia—Vancouver—Magneto Sales & Service, Ltd., 126 Gore Ave.

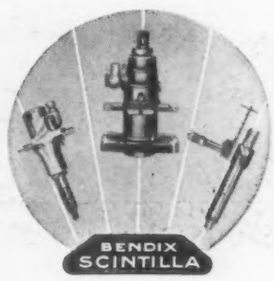
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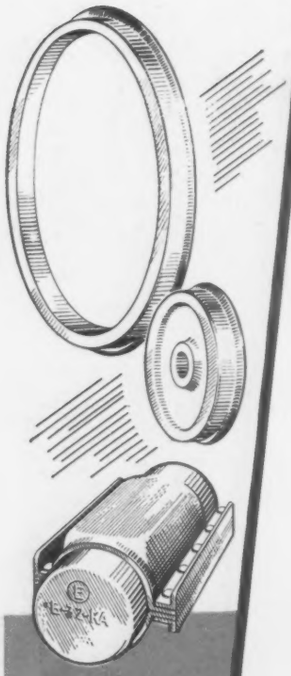
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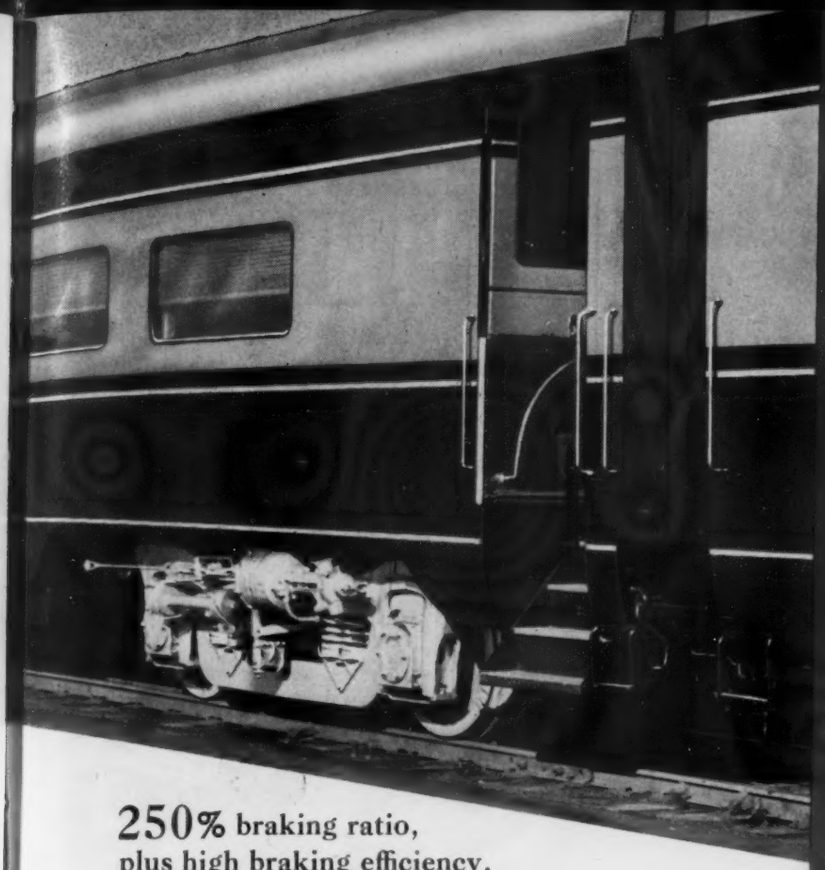
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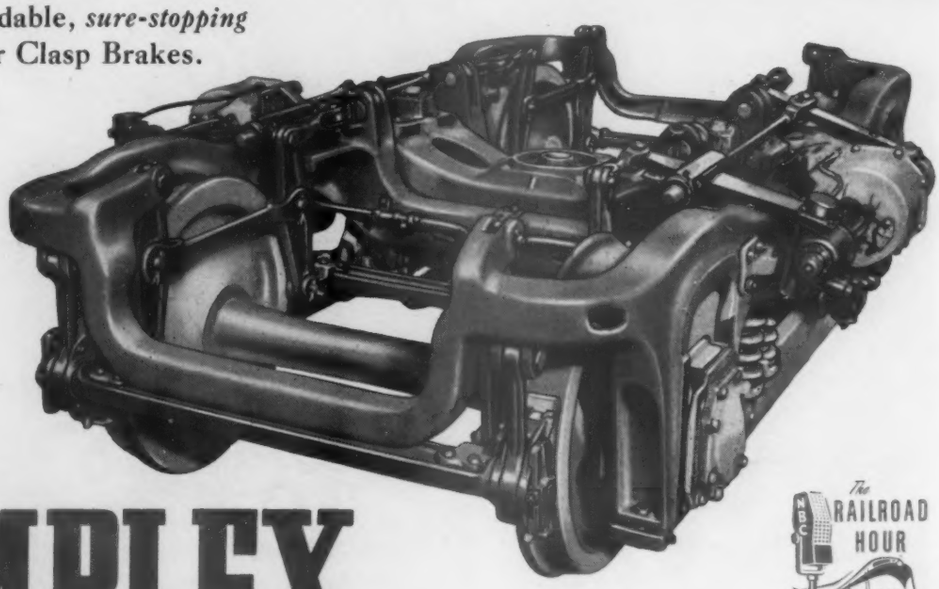
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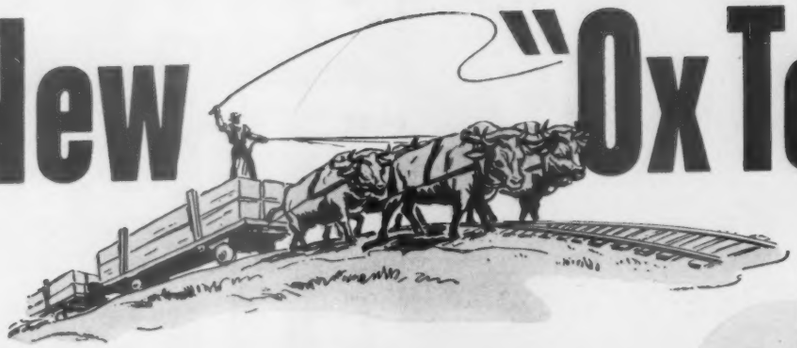
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New "Ox Teams"



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What a contrast! The ox-team hauling an East Texas "train" 91 years ago, and the new giant Diesel-electric locomotives of its great descendant —the Texas & Pacific Railway of Today!

These mammoth locomotives are sign-posts of the times. They show how the progressive Texas & Pacific—and the whole Southwest—is readying itself for a new frontier "rush"—the great industrial boom now gathering momentum in this richly-endowed region.

Thundering over T & P track in the boundless reaches of Louisiana and Texas, these locomotives are kept operating smoothly with Sinclair Gascon Oil.

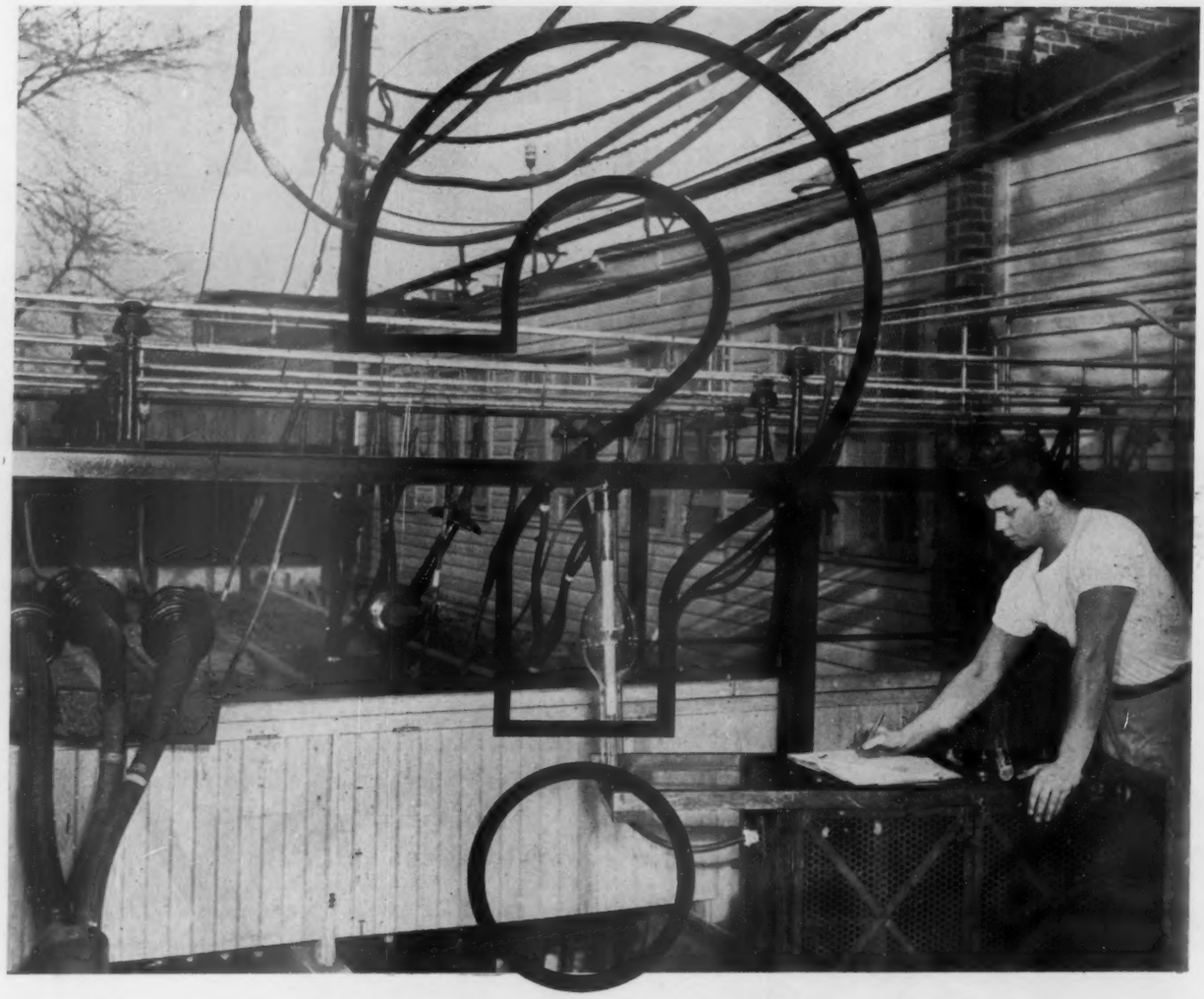
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OKONITE SINCE 1878 *insulated wires and cables*

8341

Transportation and National Defense

Noting the generous earnings—29 per cent on net assets—reported by the automotive manufacturing industry for 1949, the Wall Street Journal made an appropriate observation to the effect that it is fortunate for the country that an industry so necessary to military defense is in such a strong financial position. What, then, must be said of the national defense implications of 1949 railroad earnings at just about one-tenth the ratio on the investment that the automotive manufacturers earned? The country needs the railroads for military defense, certainly, just as much as it needs the automotive industry. Railroad earnings and credit at a level necessary to provide the funds required for adequate equipment and improvements must, therefore, be made a high-priority item on any realistic program of long-term military preparedness.

There is no mystery about the steps needed to restore health to railroad earnings and credit. These steps have been set forth in painstaking detail in recent months, in testimony to the Senate Committee on Interstate Commerce in the S. Res. 50 investigation, by witnesses for the Association of American Railroads. The railroads need no "federal aid" or artificial political bolstering of any kind. All they need, fundamentally, are two things: (1) revision in regulation to place railroads, trucks, planes and barges on an exactly equal regulatory footing when they are competing for the same traffic; (2) charges based on full costs for the long-haul commercial use of publicly owned transportation property (highways, canalized rivers and airports).

Waste Invites Defeat

Wasteful practices in production and distribution—such as using 200 trucks and 200 or more truck drivers to haul a trainload of freight a long distance, when a crew of 5 men would suffice if the movement were made by rail—are a sure invitation to defeat in the kind of struggle for survival in which this country is now engaged. Some of our governmental planning experts try to promote optimism by pointing out how much larger our output of strategic materials—steel, for instance—is than Russia's. However, it is not steel output, but *utilization* of steel where it will do the most good that gives the actual measure of the effectiveness of our defense. If a substantial part of steel production is not used for defense, or is used less effectively than it might be for that purpose, then the military significance of our country's huge steel output must be pared down proportionately. And the same is true of all our strategic materials, equipment and skilled man-power—what counts is how effectively we use these superior resources, not the mere fact that we possess them.

The chaotic political conditions which are responsible

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for our waste of resources and man-power in providing transportation—e.g., the use of trucks for long-haul transportation, or of trains for short hauls and light loads, or of canalizing rivers at great public expense for use by a few barges—are also those which have brought railroad earnings and credit to their present low state. The railroads, that is, have had poor earnings because they have been politically hindered in bidding for traffic which it is economically advantageous for them to handle, and they have been prevented politically from relinquishing traffic which they cannot handle profitably.

If heavy-duty trucks were charged for the use of the highways in proportion to cost and ton-mileage, and if loads heavier than the highways were built to bear were prohibited, then most heavy movement of long-haul freight by highway would disappear—along with the present danger that the highways will deteriorate faster than means can be found to repair them. Similarly, equalization of regulation of all transportation agencies competing for the same traffic would give assurance—now entirely absent—that the most economical agency would in each case be awarded the movement. As long as regulation and charges for the use of fixed transportation plant by the various transportation agencies are wholly unequal, as at present, then the low-cost agency will often lose the movement to a rival which consumes more fuel, more materials and more man-power than are actually required to do the job. Such waste of resources is indefensible at any time. In a time of national danger it is suicidal.

Along with the right to compete for all business to which they have a sound economic claim, the railroads should also be permitted promptly to relinquish traffic which can be moved more economically by some other agency. As matters now stand, the railroads are the only transportation agency required to continue providing unprofitable service.

Government Mandate—or Economic Force?

The division of transportation among the agencies economically best fitted to handle it can be brought about temporarily under war-time conditions by mandatory order, as was done by the Office of Defense Transportation during World War II. Such economic division can be established permanently by the adoption of equitable regulation and compensatory charges for the use of publicly owned transportation property—in which case natural economic forces will impel each transportation task toward the agency best fitted to handle it. Of the two methods of promoting maximum economy in transportation—arbitrary governmental mandate or the removal of obstacles so that natural economic forces can operate to put high prices on costly services and low prices on low-cost operations—there can be no doubt that the second method is the only one in keeping with American political principles. What justification can there be, in a country with traditions of freedom, for seeking economy by coercion when, if governmental practices which promote waste were abandoned, people would voluntarily choose the economical ways of getting their work done?

It has been proclaimed that "the railroads are ready" for any national emergency—and that statement is generally true, at least in the sense that the railroads are a whole lot better prepared than anyone has any right to expect them to be, considering the meager resources available to them. But it would be foolish optimism to believe that the railroads are anywhere near as "ready" as it is desirable for the national safety and well-being that they should be—or as "ready" as they will quickly become, if the political leaders who are responsible for our military defense will take the plain and simple steps necessary to put the nation's transportation arm on a sound economic and financial footing. Because the railroads have always heretofore performed adequately on short rations does not mean that they can continue indefinitely to produce much from nothing, or next to nothing. A reputation as a miracle-worker is dangerous, if there is any chance that, when a miracle is most needed, it should fail to come off.

Put National Interest First

The demands of special interests and pressure groups should be swept aside, and the national interest made dominant—because there is no safety for anybody, including the pressure groups themselves, if the entire nation is unsafe, as who can deny it is? There has been far too much temporizing, indecision and fumbling already on questions of national policy—and the result is that American boys are dying in Korea. We are living in a hard-boiled world of brutal fact, and ultimate victory will not go to the people who tolerate side-stepping, dissembling, and indifference to the efficiency with which materials, man-power and national resources are utilized.

A NEGATIVE ADVANTAGE OF DIESEL MOTIVE POWER

In its "Monthly Comment," reviewed on page 41 of the July 22 issue of *Railway Age*, the Interstate Commerce Commission's Bureau of Transport Economics and Statistics presented data indicating that—assuming a high level of operations equal to the average of the 1946-49 period—Dieselization of remaining steam operations might add as much as $803.8 million to the annual savings of $342.4 million which the railroads were estimated to have realized in 1948 as the result of that year's Diesel operations. Assuming a low level of operations, such as the average of 1936-39, projected savings from complete Dieselization were estimated at $418.8 million. These estimates were taken from a "Study of Railroad Motive Power" which the bureau has since issued.

That there are pitfalls in projecting data on current operating comparisons of Diesel and steam motive power,

in the development of which certain assumptions have been made, is recognized by the bureau, which offers the projections "not as estimates of the potential savings, but as simple mathematical extensions of the unit savings in 1948 on the basis that all freight, passenger, and yard service performed by steam power were to be performed by Diesels."

The study discusses some of the questions pertaining to the probability that the unit savings which apply to the present proportion of Dieselization will continue as the Dieselization continues to completion. While it expresses no final conclusions on this question, its analysis does not support the claim that further Dieselization will not be as economical as that in the past.

But there is another aspect of the trends affecting the projected total savings from use of Diesels which is not touched upon in the bureau's consideration of this part of the general motive-power study; that is the effect of the trend toward complete Dieselization on the attitude of the railways toward the steam locomotive. Diesels have taken the center of the stage so completely that the trend of locomotive operation is toward lower efficiency, which will inevitably lead to increasing unit costs. The interest in steam-locomotive fuel economy is on the wane, presaging increasing carelessness in handling coal both on and off the locomotive. It may, in time, unfavorably affect the quality of the locomotive coal purchased.

There is no longer an active interest in improving facilities for servicing and repairing steam locomotives. Facilities of the character needed by large modern steam motive power are in many cases not available, and, as things look now, never will be provided. Modernization of steam locomotives has almost ceased to be a subject of current interest. As a result, many locomotives will continue in operation as they are today for a period longer than required to justify improvements looking toward reduced operating costs.

The cessation of capital expenditures for improvement of steam operation may be sound policy if such expenditures for temporary benefits curtail the amount which can be spent immediately on the program of long-term improvement by Dieselization on which management has decided to embark. But the direct effect on its operating economy of the growing psychology of indifference toward the steam locomotive, through laxity in adhering to maintenance standards, failure to keep up needed stores stocks, and loss of interest in steam-locomotive fuel economy cannot be justified on these grounds.

Such considerations affecting the future trend of steam operating economy will increasingly affect the differential between steam and Diesel operating costs in favor of the Diesel as time goes on.

"What all of us should keep in mind is the fact that in order for this country to be completely safe from a defensive point of view it must keep its railroad system in a healthy condition, ready to handle at a moment's notice any amount of traffic it may be called upon to move."—*Olean, N. Y., Times Herald.*

TOO MUCH EMPHASIS ON INITIAL COST

An acute and friendly student of railway operations makes the observation that, in traveling about the country, he is frequently struck by the evidence he sees that much railway construction is performed with more of an eye toward minimizing construction costs than in reducing operating expenses or attracting traffic. This consideration merits some attention when a railroad is confronted with the problem of replacing an outmoded passenger station, freighthouse or office building. In this situation, several alternatives are possible. One is to retire the existing structure and replace it with an entirely new building. Another is to modernize the existing building by appropriate structural changes. Regardless of which of these procedures is adopted, a decision must be made on the amounts of money to be spent, which decision may largely determine the attractiveness and permanence of the new or modernized facility.

As the observer we have quoted has said, the decision on this question is frequently determined largely or entirely by the desire to do the work at the lowest possible initial cost. The dominance of this consideration, however, may result in a structure which is less economical than one that gives full weight to all factors. For instance, on one road now engaged in a program of modernizing some of its office buildings, the view is held that the expense involved in using first-class materials is more than justified by reduced maintenance costs and the greater life-expectancy of the structures.

Another consideration, important even if intangible, is the effect of surroundings on the employees involved. There is a growing conviction on some roads that attractive, modern offices and other buildings where people work have a definitely beneficial effect on their spirits, and, consequently, on the efficiency with which they perform their tasks. This is one of the factors that motivated the Texas & Pacific to undertake an extensive long-range program for modernizing its passenger stations, as described in the *Railway Age* of June 24. Obviously, this effect on employee morale cannot be measured in quantitative terms, but close observation leaves no doubt about its validity. Never before has the need been greater to promote good relations between employees and management, and to induce employees to feel proud of their employer. The provision of attractive working surroundings is certainly a means to this end.

There is no intention here to suggest that every new or modernized railway building should be a monument of expensive construction. Railway structures should be appropriately and attractively functional—not monumental. Obviously, there are situations where anything more than temporary construction, using relatively cheap materials, would be unjustified. Construction costs are not a factor to be slighted—the point is, rather, that such costs should not be the only deciding factor or even the dominant one. Wisdom in such decisions is the product of due consideration of *all* pertinent factors; initial cost is but one.

Cost of Industrial Eye Accidents UP *78½%

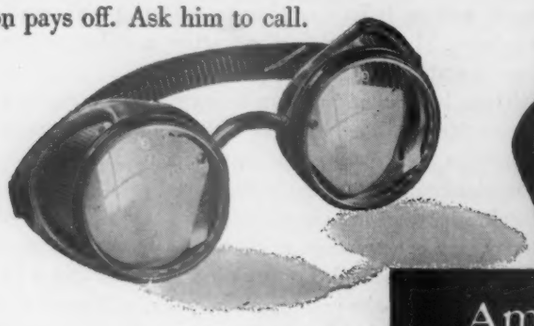
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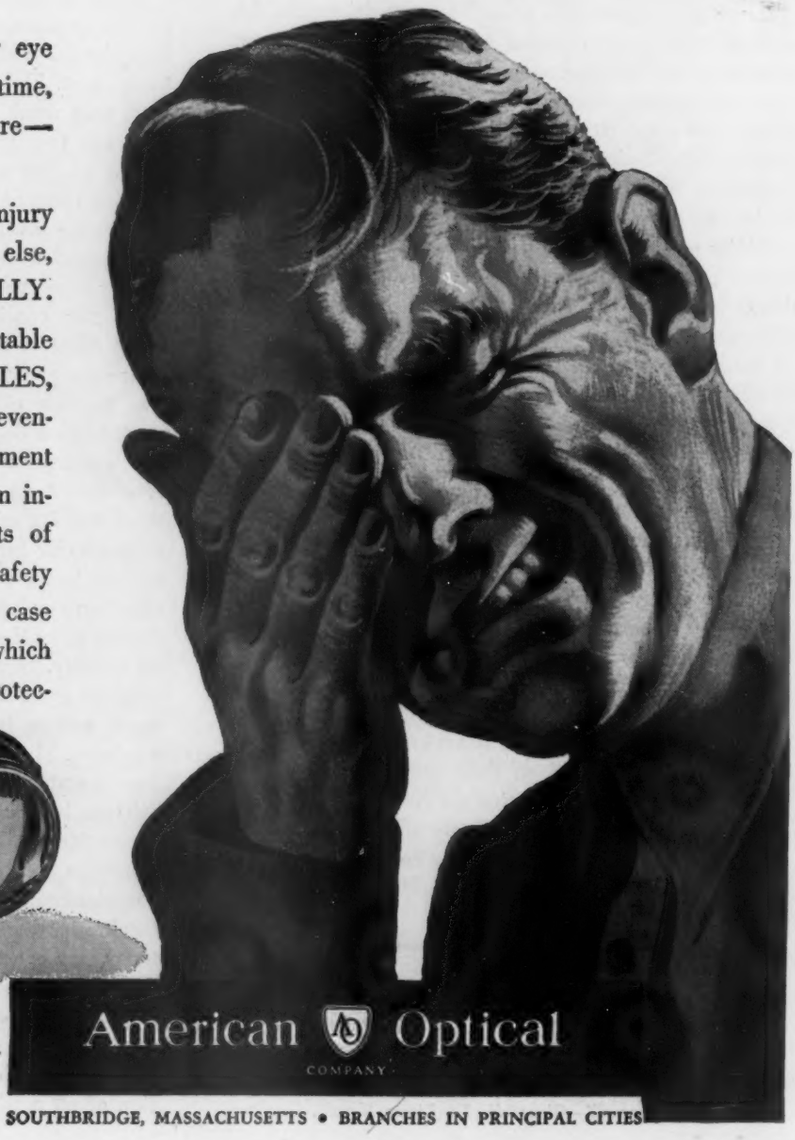
BUT IT'S AN EXPENSE YOU CAN CUT 98% IN THESE DAYS OF STILL INFLATED COSTS!

At a $15 average, even a *minor* eye accident costs too much in lost time, idle machine time and medical care—even in periods of normal costs.

Today, like everything else, eye injury costs are UP—but *unlike* everything else, THEY CAN BE CUT, DRASTICALLY.

98% of eye accidents are preventable when workers wear SAFETY GOGGLES, according to The Society for the Prevention of Blindness... and management has found the costs of the protection infinitesimal as compared to the costs of injuries saved. Your nearest AO Safety Representative can show you many case histories in *your* industry alone which prove conclusively that adequate protection pays off. Ask him to call.





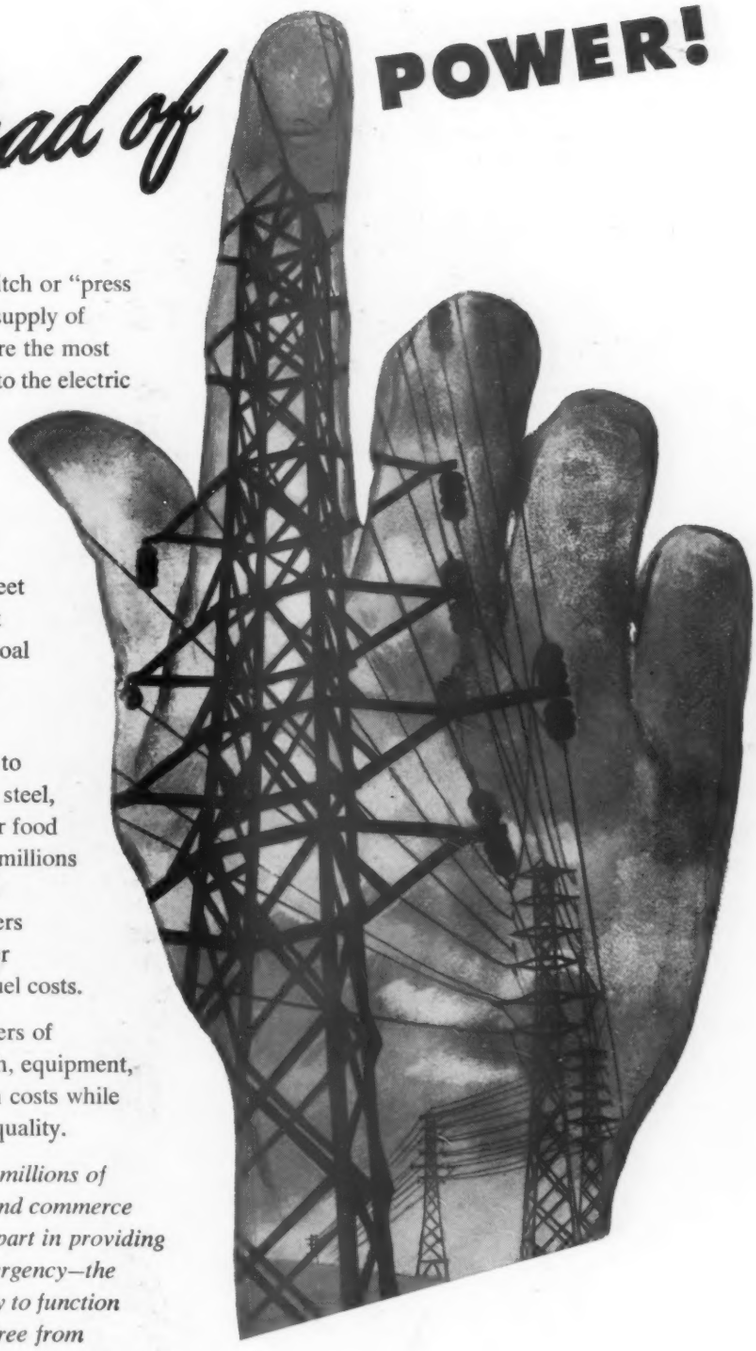
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To do this big job efficiently, the producers of coal continue to invest heavily in research, equipment, and methods aimed to reduce production costs while delivering better prepared coals of good quality.

● *To continue most effectively to serve millions of America's homes, as well as its industry and commerce and to be ready to play its indispensable part in providing all the power needed in any national emergency—the coal industry requires only the opportunity to function at its best, in a fair competitive climate, free from governmental interference.*

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WASHINGTON, D. C.

a railroad man looks at RDC

The following is quoted from a letter received from a railroad official: "From my viewpoint, the RDC-1 represents one of the few opportunities offered the railroads to adapt themselves to new conditions and challenges, for I believe we all ought to seek new selling points, offer the public something rather than sit back and bellyache because the public won't buy the same old package. The latter policy only leads to progressive line abandonments, and loss of business for both rails and car builders."

RDC in its present four models is suited to every form of railway passenger, baggage and mail carrying except sleeper service.

The Budd Company, Phila. 32.

Budd



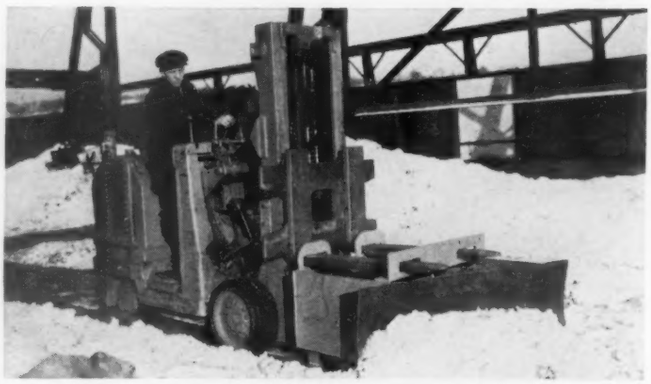
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Oxyacetylene flame cutting is used to cut the old steel to proper size, and the money-saving electric arc quickly fabricates these pieces into snow plows, skids, lubricator drive arms, and a variety of other parts.

Call in an Airco Railroad Representative. He'll be glad to advise you on the most efficient application of the economical oxyacetylene flame and electric arc as it affects your problem. His long experience helping other roads will more than help you get big dividends from your scrap pile. Write or phone your nearest Airco office today.



A snow plow built by a leading Western road, using Airco's top-quality Nos. 78E and 387 electrodes.



Skids, pallets and trays built by another road — again using Airco improved, high-quality Nos. 78E and 387 electrodes.



Building a lubricator drive arm with the quickly solidifying No. 78E electrode. The steel pieces were oxyacetylene flame cut from scrap.

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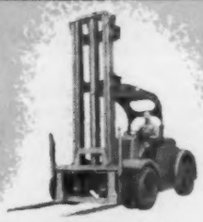
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Left—As cars approach the hump, they are inspected from an undertrack inspection pit through shatterproof glass windows, with the assistance of a battery of floodlights. Right—Routes of cars through high-speed power-operated switches are set up by this automatic switch control machine in the humpmaster's office. Routes for four different cuts of cars can be "stored" at one time. Trimmer signal and hump signal are interlocked

Canadian Pacific Builds $12 Million Freight Terminal

Extensive hump-retarder yard at Montreal, Que., combines the functions of three smaller yards and two enginehouses

On July 6, the Canadian Pacific formally opened its new St. Luc freight terminal near Montreal, Que., thereby signaling the completion of two and a half years of construction work involving an expenditure of $12 million. The new terminal embodies a hump-retarder yard, comprising the conventional receiving, classification and departure-track groupings. It is the first freight classification yard of this type to be constructed in Canada and is equipped for push-button control and electrical braking. Also included are a 37-stall enginehouse with machine shop, cinder disposal, coal and water facilities; a Diesel locomotive shop and servicing facilities; car-weighing, icing, storage, inspection and repair facilities; an intra-yard communication system; 75-mi. of new trackage; and accommodations for train crews.

St. Luc yard replaces three existing yards—Sortin, Outremont and Hochelaga—in Montreal as well as enginehouse facilities at the latter two locations. The need for the improved and enlarged facilities was brought about by growth in freight traffic during the past 10 years which made operations difficult in the three existing yards, particularly when handling the peak volumes of World War II. Because of the growth of industries which surrounded them it was not feasible to expand these three yards, so the road built the new terminal on a 682-acre tract of land southwest of the city where the main line leading to Montreal from Smith's Falls, Ont., and the west intersects the main line from Sherbrooke, Que., and the east. About 3,000 cars (single count) can be handled through the St. Luc yard in 24 hours.

Movement Is Unidirectional

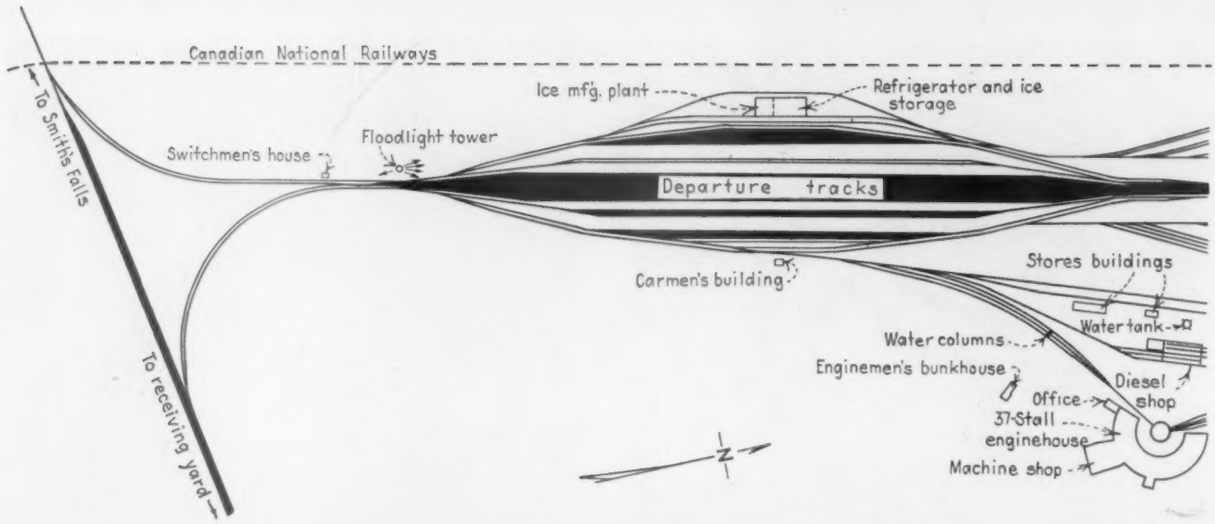
The new terminal is laid out like a huge traffic circle whereby traffic arriving from the east, west and south is routed on a unidirectional basis. Trains enter the receiving yard at the same point, pass over the hump into the classification yard and leave the departure yard at one point. This arrangement minimizes the possibility of conflicting movements.

The receiving yard contains 15 tracks and has a total capacity of 1,151 cars. A good portion of the length of this yard is built on a 2-deg. 45-min. curve so that a train which enters the yard at its east end, is being pushed south when it leaves this yard for the hump lead.

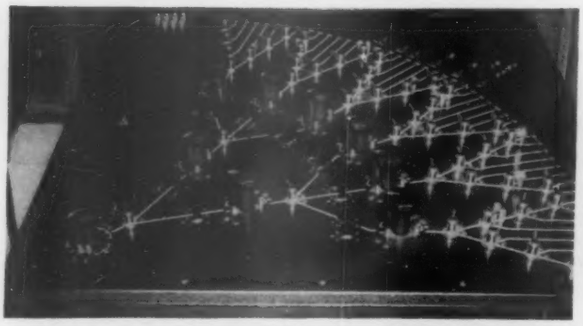
To facilitate the careful examination of the running gear and the underbody parts of cars, an inspection pit



Looking down the hump into St. Luc classification yard. In the near foreground, in advance of the track scale, is an automatic scale retarder which is equipped with short track circuits and timing relays to maintain correct speeds of cars when passing over the scale so that they can be weighed while in motion



Plan of the C.P.R.'s new $12 million St. Luc freight terminal at Montreal, Que. It was constructed on a low-lying 682-acre tract of land. More than 1.4 million cu. yd. of earth were required for embankment and approximately 7.5 mi. of track were laid on 200,000 cu. yd. of gravel ballast. This yard is the first hump-retarder yard to be built in Canada



Retarder controls are regulated by the operator of this machine in the retarder control tower

has been provided on the hump lead just in advance of the crest of the hump. This inspection pit is constructed of reinforced concrete and is equipped with shatter proof plate glass windows in the top and with floodlights. It is manned by three men—one seated under the center of the track and one man seated under the outer side of each rail. A dragging-equipment detector is to be installed in advance of the inspection pit to operate a warning signal within the pit and also to set a hump signal at "stop" in the event that anything is dragging.

Diesel power is used for pushing cuts of cars out of the receiving yard to the hump and a short spur track, serving a fuel-oil storage tank, pumphouse and crane facilities, was provided near the crest of the hump to permit the fueling of these locomotives.

A one-story brick humpmaster's office, 17 ft. by 25 ft. in size, with a reinforced concrete frame and roof slabs, was constructed near the crest of the hump. This building provides accommodations for two car checkers and the foreman in charge of humping operations. Also, it houses an automatic switch-control machine and hump-signal equipment.

Hump Signals

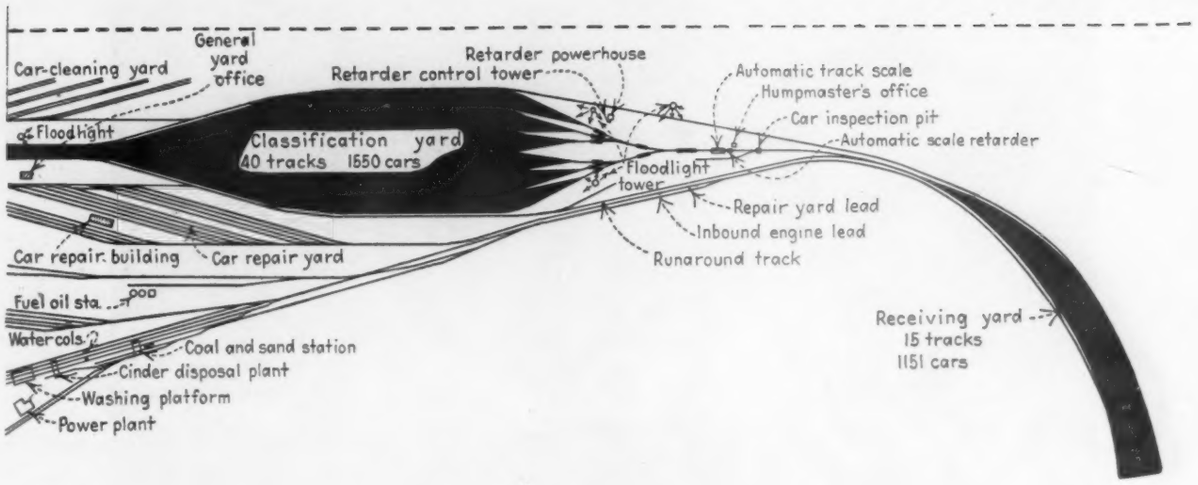
Control over hump movements is exercised by a signal system operated from the humpmaster's office. Since a view of this signal from the engine at the rear of a string of cars being pushed to the hump may be restricted by foul weather or by other cars standing on the curve, track circuits were installed on each track in the receiving yard and the hump Diesels were equipped with cab signals. The circuits and cab signals are so arranged that, when two engines are used alternately in humping operations, only one can receive a proceed indication.

The hump signal mast also carries a trimmer signal, which faces in the opposite direction toward the classification yard. The trimmer signal and the hump signal are interlocked to prevent conflicting movements. A repeater signal was erected part way down the classification yard to repeat trimmer signal aspects.

Cars Weighed in Motion

Another feature of the hump is the weighing of cars while in motion. This is accomplished by a Fairbanks-Morse four-section, suspension-bearing type track scale which has weigh rails 76 ft. long and a capacity of 150 tons. This scale was installed slightly beyond the crest of the hump. Because the operation of this type of scale requires that each car to be weighed must be scaleborne for a period of not less than four seconds, an automatic scale retarder was installed just in advance of the track scale. The scale-retarding device is equipped with a number of short track circuits connected to timing relays, which check the speed of the car and automatically arrange for the proper amount of retardation and release as may be required. A control button in the humpmaster's office enables the foreman to render this retarder inoperative when cars being humped do not require weighing, or for trimmer engine movements, and to apply full retardation if it is necessary to bunch the slack in cars at the crest of the hump to enable a brakeman to pull the coupling pin when making a particular cut. The scale is equipped with a Streeter-Amet automatic recording device to register the gross weight of the car.

The hump-retarder track layout fans out through one, two, then six General Railway Signal retarders and 39



power-operated switches into a 40-track classification yard which has a total capacity of 1,550 cars. Provision was made in this yard for eight future tracks with a total additional capacity of 344 cars.

Another feature of the hump equipment is an entirely new system of automatic switch control developed by the General Railway Signal Company. Under this system, the trackage between the crest of the hump and the switches leading to classification tracks is divided into a number of circuits by insulated joints and the routing of a car to any specific track in the classification yard is accomplished by pushing a button on a control machine in the humpmaster's office. The route to be followed by that car is then set up by a system of relays which position switches along the route, immediately in advance of the movement of the car, until it reaches its designated track.

High-speed electric switch machines are used with the track circuits, which are so arranged that switches cannot be thrown either under a car or whenever there is insufficient time for a switch movement to be completed. However, proper spacing between successive cuts of cars must be maintained so as not to misdirect following cars.

This system also provides for "storing" route directions for four consecutive cuts of cars at one time. As one movement is completed another may be set up or, if three movements have been completed, three more may be set up. An advantage of automatic switch control over the conventional system is that it eliminates the necessity for manipulating controls for each of the four to seven switches that each cut of cars must pass over en route from the hump to a classification track.

With manual switch control in a yard of this size, three retarder operators stationed in three separate towers would have been required. Under automatic switch control, one operator in a single tower controls all retarder operations and is relieved of the positioning of switches because the routes are established by the foreman in charge of humping operations.

Composite Departure Yard

In operation, "pulldown" locomotives remove the strings of cars from the classification yard through one of four ladder tracks and leads to the departure yard where the cars are assembled into trains. The departure yard is a composite yard of 35 tracks divided into five track groupings and having a total capacity of 1,717 cars. The groupings consist of 12 departure tracks holding 958 cars; 8 way-freight tracks holding 220 cars; 9 storage tracks holding 394 cars; 4 caboose tracks holding 65 cars; and 2 icing tracks holding 80 cars. The tracks assigned to the storage grouping are for cars containing merchandise for overseas points but which may be held in Montreal rather than at the point of embarkation awaiting shipping space. Several gaps have been provided between these various groupings to permit the construction of 21 additional tracks for future requirements, which will hold approximately 1,270 more cars.

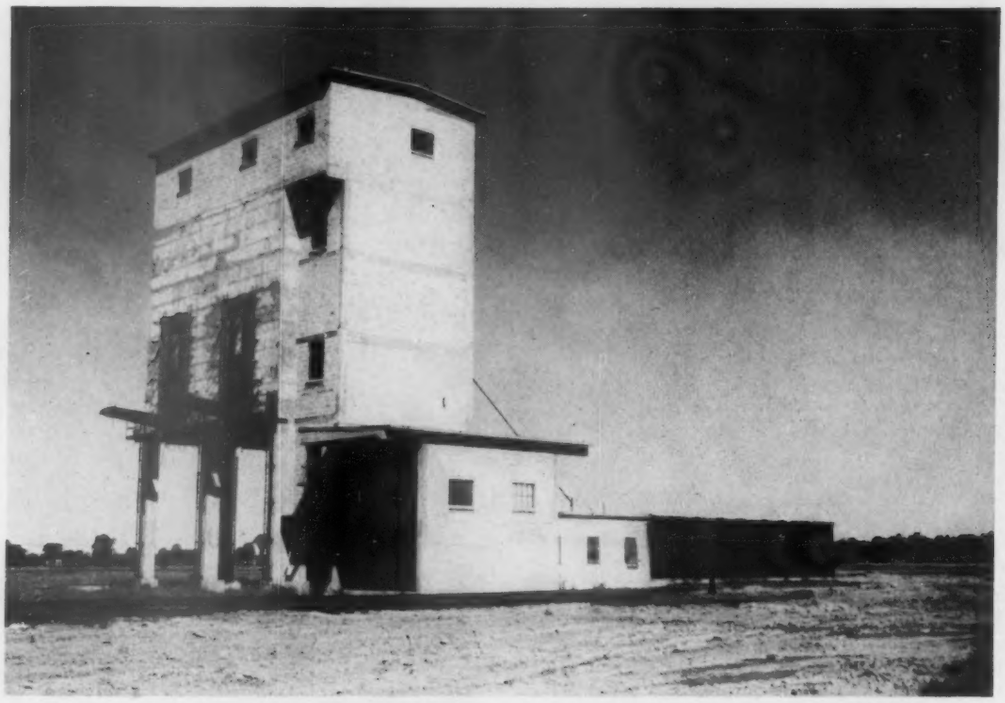
An 8-track car-cleaning yard with a capacity of 144 cars was constructed west of the lead tracks which connect the classification with the departure yard. These tracks are in widely separated pairs to allow for the disposal of rubbish between them. On an opposite site, east of these lead tracks, a 13-track car repair yard with a capacity of 299 cars was built, together with a two-story brick building providing shop facilities, office, dining, locker and washroom space for the personnel engaged in the maintenance of freight cars. Other service tracks include eight other tracks for the stores department, auxiliary tracks, coal and cinder handling tracks, and caboose transfer tracks.

Freight Yard Buildings

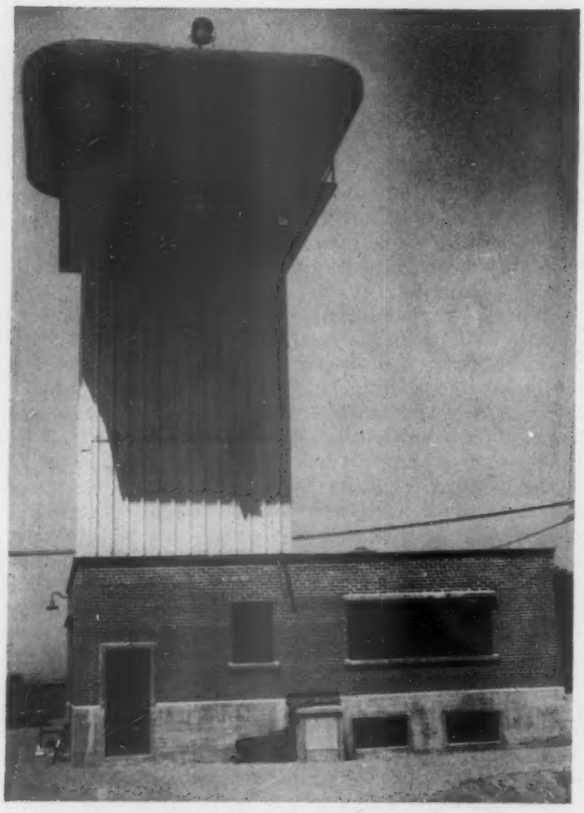
The general yardmaster's office building was constructed just east of the leads connecting the classification and departure yards. This is a two-story brick building, 35 ft. by 70 ft. in size, containing office space for the yard-office staff. A tower office for the general yardmaster, erected at one end of this structure, is equipped with glare-reducing plate-glass windows, thus providing a vantage point for the observation of operations in both yards.

The retarder-control tower is located strategically with respect to the retarders, the observation floor being 45 ft. above track level and containing the control machine. Glare-reducing plate glass is installed on three sides of this tower. The ground floor of this structure accommodates relays and power generating equipment, as well as work space for maintainers. The basement contains storage batteries, a heating system, toilets and lavatories.

A signal tower was constructed near the entrance of the receiving yard. This tower accommodates centralized traffic control equipment for controlling main line signals



The new coaling station at St. Luc yard serves three inbound engine tracks and holds 400 tons of coal. It also contains dry sand pockets with spouts for sanding locomotives at same spotting



This retarder control tower has a reinforced-concrete and brick ground floor with a steel frame tower enclosed in corrugated asbestos siding. The observation tower is 45 ft. above track level and contains the retarder-control machine

and switches governing movements to and from the new terminal from all directions for both inbound and outbound trains. To provide for future interlocking of the receiving-yard entrance, the upper floor of this structure is at a height that will provide a good view of the throat of the yard and is glazed with Thermopane glare-reducing plate glass.

Communications

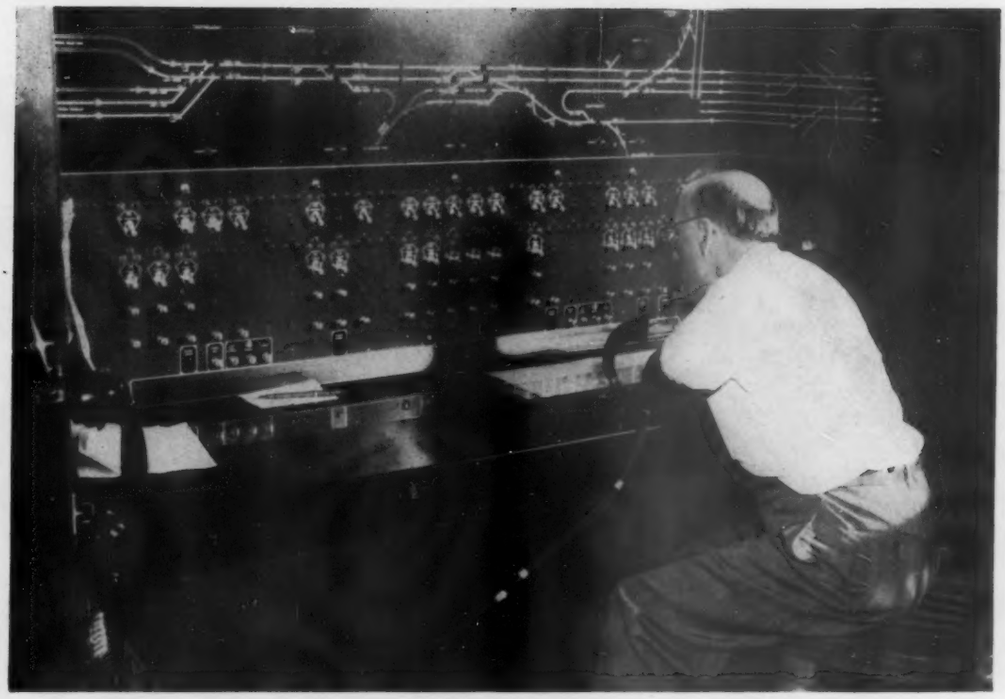
Several systems of communication facilities have been provided for transmitting instructions and exchanging information throughout the terminal area. Among these is a 100-line automatic telephone exchange system, with 40 telephones now installed. Approximately 20 telephones, incorporated in the Bell System, provide service with the Montreal area. Also, telephone and telegraph instruments have been installed in the signal control tower and the general yard office for direct communication with train dispatchers at Smith's Falls, Farnham, Que., Park Avenue suburban station at Montreal, and Utica, N. Y.

A teletype system, with a transmitter located in the general yard office, is used for supplying humping lists, prepared from conductors' waybills, to the humpmaster's office and the retarder control tower.

Main-Line Signaling

In addition, a loud-speaker system, with instruments in the car-inspection pit, humpmaster's office, retarder and control tower, and the general yard office, with outside speakers for skatemen in the classification yard, provides direct communication between those concerned with humping operations.

To provide means for easy entrance to and exit from



This C.T.C. machine in a signal tower near the entrance to the receiving yard controls the movements of trains on the main track approaches from three directions

St. Luc yard, connections with main-line tracks have been made at four existing junction points, and two new junctions were established. At all of these points, power-operated switches have been installed as well as signals to control train movements to or from the yard, or over the main line.

Operation of the switches and signals is controlled from a machine in the signal tower at the entrance to the receiving yard. Coded track circuits have been employed to avoid possible interference from stray electric currents which might be experienced with conventional steady energy circuits.

Locomotive Terminal

The locomotive terminal facilities were constructed on a large tract of land east of the car-repair yard. The dominating structure of this installation is a 37-stall roundhouse built concentric to a 110-ft. three-point bearing turntable. The building is of fire-resistant construction with reinforced concrete frame, brick walls, and a tar-and-gravel roof laid on precast Haydite slabs. Of the 37 stalls, 27 are 130 ft. long and 10 are 140 ft. long. One of the features of this building is a direct-steaming system.

A large machine shop, approximately 160 ft. wide by 200 ft. long, adjoins the enginehouse and provides space for making running repairs. It is equipped with a full complement of lathes, shapers, boring mills, drill presses and other related machines used by blacksmiths, carpenters, electricians and allied trades. A lunchroom and wash-and-locker rooms for shop employees are also located in this area. A Whiting drop table has been installed under three tracks entering the machine shop to permit changing of the drivers on steam locomotives and the removal of trucks from Diesel units.

The turntable is connected by an inbound track direct from the leaving end of the receiving yard so that road locomotives, after bringing a train into the receiving yard, can be cut off and run to the locomotive terminal without interfering with humping operations. Another track connects the turntable with the leaving end of the departure yard for outbound locomotives.

Several other tracks have been constructed in advance of the turntable to provide steam locomotive servicing operations in one continuous forward movement, and various facilities have been built along this route. These include a sanding and coaling station serving three tracks; two water cranes for serving two tracks each; a three-track cinder disposal plant; blowdown pits; and a reinforced-concrete washing platform serving three tracks.

Two spur tracks were constructed to serve a new power plant. This plant houses three boiler units, each of which develops 35,000 lb. of steam an hour at a boiler pressure of 250 lb. The steam is used for the direct-steaming system in the enginehouse, terminal building heating, and for washing locomotives. This plant also contains air compressors for supplying compressed air to air charging lines in the departure yard as well as to the enginehouse, car-repair yard, a Diesel shop, and other facilities.

Other important terminal facilities include a four-track Diesel repair shop, in which two tracks are through tracks; a water station, including a 100,000-gal. elevated steel tank; a Diesel fuel-oil station, including a pump-house and two 105,000-gal. storage tanks; a large stores building; a waste reclamation plant; an ice-manufacturing plant and storage building; a sewage-disposal pumping station, and a bridge and building workshop.

Rounding out the facilities to complete this terminal is a two-story brick building, 40 ft. wide by 95 ft. long, which is used as an enginemen's bunkhouse. This structure is of fire-resistant construction and contains 30 bedrooms, equipped with two beds each, and provides cooking and dining space, lounge, toilets, showers and lockers.

WHEREVER YOU USE WOOD..



IN THE SOUTH, prolonged high temperatures cause light-bodied preservatives to leach and evaporate from the wood, thus exposing the wood to termite attack and decay. Barrett* Coal-Tar Creosote, heavier bodied and of lower volatility, prevents this condition. It stays in the wood longer under all conditions—doesn't "run out" on the job.

IN THE NORTH, poles must resist the tremendous weight of frequent sleet storms. Avoid preservatives which *weaken* the wood. BARRETT Coal-Tar Creosote allows poles to retain their maximum strength, and helps to keep the poles at their best and hold the lines aloft.

IN THE DESERT, crossties broom, shatter and split from extreme dryness and heat. Solutions made with BARRETT Coal-Tar Creosote retard this, and also reduce mechanical wear of crossties through their lubricating action on the wood fibers. In poles, heavy treatment with BARRETT Coal-Tar Creosote substantially reduces checking and splitting.

IN THE SWAMPS, forces of decay are almost at their maximum of destructive power. High moisture content and infection from other decaying wood and debris are ever-present menaces. Poles properly treated with BARRETT Coal-Tar Creosote have survived under swamp conditions for years.

IN FRESH WATER, many preservatives leach out of wood. BARRETT Coal-Tar Creosote resists this leaching action. Being only negligibly soluble in water, it is the preferred preservative for use on submerged wood structures, or those exposed to the powerful action of rapidly flowing water.

IN SALT WATER, marine wood-borers give a preservative its severest test. Of hundreds of preservatives that have been tried through the years, *Coal-Tar* Creosote is the only one that has proved consistently effective against teredos, limnoria and other salt-water enemies of wood.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

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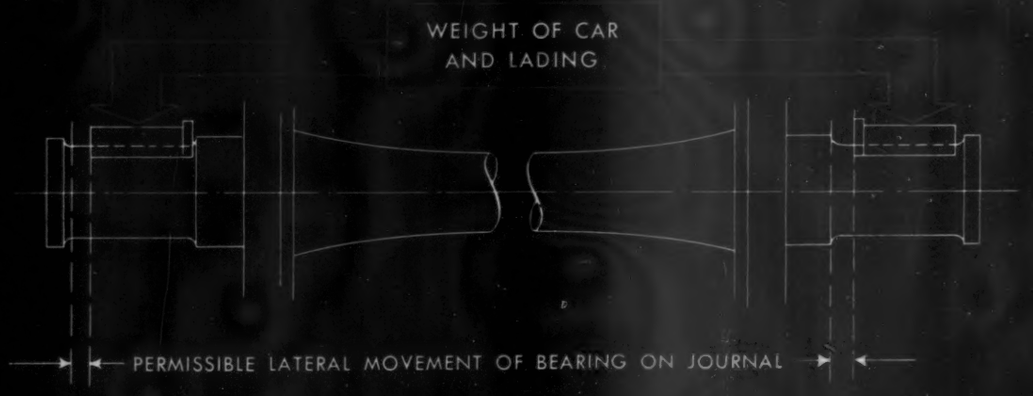
*Reg. U. S. Pat. Off.

Only coal-tar creosote wood preservative has been used long enough and widely enough to have proved its effectiveness under all conditions.

COAL TAR CREOSOTE

Lading gets a smoother ride when lateral shocks are absorbed HERE





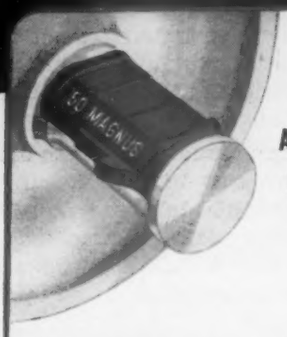
That's why A. A. R. Solid Bearings give unequalled riding quality with any standard truck

No matter how good the roadbed, you can't get away from lateral shocks and vibration. But with A. A. R. solid journal bearings, the permissible lateral movement helps absorb these shocks before they reach the car and lading. By flexibly controlling — rather than rigidly opposing this inherent lateral thrust — the solid bearing gives lading the smoothest possible ride with any standard truck.

This is just one of the *many* advantages of the solid bearing — the dependable, low cost bearing that has no equal for railroad rolling stock.

Write for additional data

MAGNUS METAL CORPORATION
Subsidiary of **NATIONAL LEAD COMPANY**, *New York, Chicago*



Here's why America's Railroads have standardized on the solid journal bearing

MAXIMUM DEPENDABILITY: In high speed service, a record of 42,000,000 car miles without a "heating."

LOWEST ACCELERATING AND RUNNING RESISTANCE: Glides on a single film of oil, like a skater on ice.

EASE OF MAINTENANCE: Can be fully inspected or replaced *on the line*. No shopping required.

UNIVERSAL INTERCHANGEABILITY: Simple—dependable—economical—safe.

LIGHT WEIGHT: Saves up to 100,000 lbs. dead weight per 100-car train.

ROCK BOTTOM COST: Saves over 25% on initial *car* cost — 96% on bearing replacement.

Potato hauler



The Aroostook Valley Railroad operates 36 miles of main line and 12 miles of siding in the heart of Maine's famous potato land.

Two "Caterpillar" Diesel-powered 44-ton locomotives do the hauling, averaging 8 to 16 hours of work a day. The locomotive shown here pulls about 5500 carloads of potatoes in the course of a year, besides 1200 cars of mixed freight.

In 1948 both engines were in a roundhouse fire that seriously damaged them. The fire occurred at 4 in the morning. By 10 o'clock one engine was making its scheduled run, only 3½ hours late. That is typical of "Caterpillar" dealer service. It's available – *anywhere* – 24 hours a day. And the dealer's complete parts facilities make it unnecessary for railroads to tie up funds in parts stores.

"Cat" Diesel Engines are now built in 10 sizes up to 500 maximum horsepower. In multiple installations they can provide power for a 2000-hp. locomotive.

Specify "Cat" Railroad Diesels on your locomotive and railcar orders. Consider "Caterpillar" economy when ordering replacement power. **CATERPILLAR TRACTOR CO. • PEORIA, ILLINOIS**

LOOK UNDER THE HIDE



The advanced design of the "Caterpillar" fuel injection valve offers owners maximum simplicity. Machined to extremely close limits, these valves are made from the finest quality materials—and are subjected to very detailed hardening processes. Valves are completely interchangeable and are adjustment-free. A large single orifice minimizes fouling. With the matched design of valves and precombustion chambers, owners use low-cost, non-premium fuels to get top-notch economy. Look under the hide for quality. It doesn't show on the outside—it shows up in performance.

CATERPILLAR

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Railroad Diesels



More Traction in Alco-G. E. Road-Switcher

Motor insulation of 1,600-hp. unit raises continuous current from 900 to 1,085 amp. and tractive force 25 per cent

The American Locomotive Company and the General Electric Company have announced a new design of Diesel-electric road-switcher in which major improvements have been made in electrical equipment which has resulted in an increase in continuous tractive force of almost 25 per cent, or a total of 52,500 lb. for the same 65-m.p.h. gearing that formerly produced a continuous tractive force of 42,500 lb. This locomotive is now offered with dynamic braking when desired.

Steam generators may be applied with capacity up to 3,500 lb. per hour with an 800-gal. water tank. When the water storage tank is not required a 1,400-gal fuel oil tank may be used instead.

The engine-generator assembly interchangeability between the road-switcher and other road locomotives has been simplified by substituting direct gear drive for belt drive on the road-switcher auxiliary generators.

The base weight of the 1,600-hp. all-purpose locomotive has been increased to 240,000 lb. and can be increased to 250,000 lb. as a modification. Uniform axle loading is maintained as fuel and water are consumed. The standard switching locomotive is equipped with schedule 6-SL air brakes with clasp brakes and shoes on all wheels of the four-wheel trucks. When six-wheel trucks are used single shoes are used on all wheels.

The underframe is a steel weldment and the superstructure is of welded steel plate. The operating cab is between the low hood covering the power plant and the hood provided for the steam generator. The hood in front of the cab covers the engine and other apparatus. The radiators are located in the forward end of that hood. The section of hood over engine and generators is removable. There is a bulkhead which isolates the generator. Doors in the sides and roof of the hood provide access to equipment.

The cab is of welded steel with controls on the right side facing the engine hood and two seats on the left side of the cab. Doors are located in the right side of the rear wall and the left side of the front wall, as well as in the rear cab wall for access to the rear hood.

The locomotive is powered by an Alco model 244 engine which is a vee-type 1,600-hp. unit having 12 cylinders of 9-in. bore and 10½-in. stroke and a full-load speed of 1,000 r.p.m. The engine is turbosupercharged. Engine starting is effected by using the main generator as a motor, with current supplied by storage battery. Gear-driven centrifugal pumps circulate water through engine, radiators and lubricating oil filters. Air flow through the radiators is controlled by modulated shutter control and by the variable speed of the radiator fan, which is driven by an eddy-current clutch.

Engine lubrication is by means of a gear-driven pump with an oil reservoir in the engine base. In case of low oil pressure, the engine is stopped by automatic controls.

The engine control stand at the left of the operator's seat contains throttle, selector handle, reverser handle, air brake valves, and circuit-breaker type switches for generator field, fuel transfer pump and control circuits, headlight switches, light switches, air-brake gages, speed and transition indicator, load meter, and wheel slip indicating lamp, as well as signal lights for low oil pressure, high engine water temperature, and ground relays.

The air brakes are schedule 6-SL on road-switchers and 24-RL on road locomotives. Air is supplied by a two-stage, three-cylinder compressor direct driven by the main engine. The displacement at idling speed (350 r.p.m.) is 78.7 c.f.m. and at full engine speed (1,000 r.p.m.) it is 225 c.f.m. Two main reservoirs, below the underframe, have a total capacity of 60,650 cu. in.

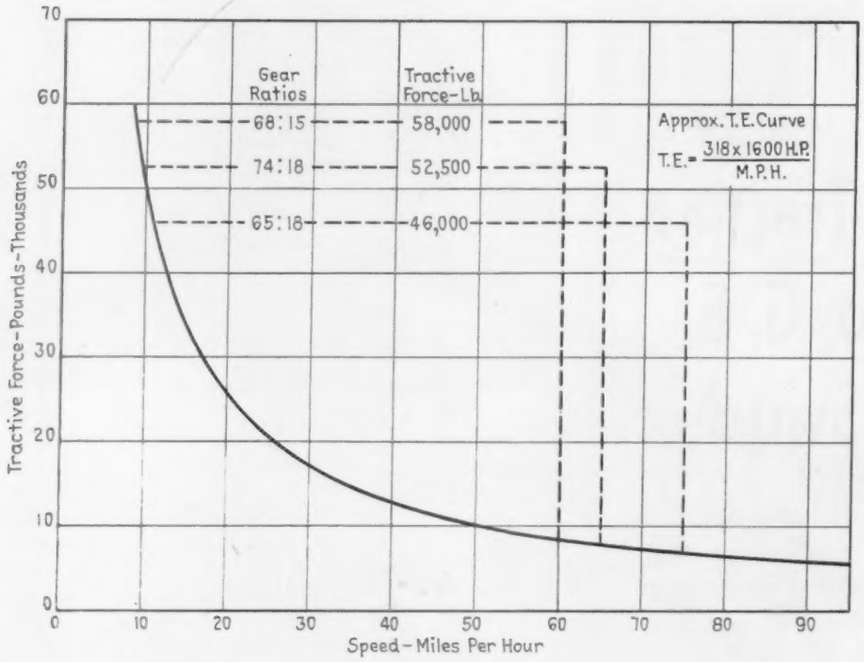
The trucks on the switchers are four-wheel, with clasp brakes, and are of the swing-motion swivel type with pedestals. The axles have 6½-in. by 12-in. journals and the rolled-steel wheels are 40 in. diameter. The motors are supported by the axles to which they are geared by spring nose suspensions on truck transoms. Plain steel side bearings and swivel-limiting devices are used.

Where six-wheel trucks are used for road passenger service, they are of the swivel, swing-motion type, with cast-steel pedestals. The trucks are arranged for application of two motors per truck, one to each end axle. The frames of these trucks are spring supported on equalizers with coil and snubber springs between center and end axles. The journals are 6½ in. by 12 in. There are two 12-in. by 10-in. brake cylinders per truck.

The regular locomotive equipment consists of cab heaters, window wipers, warning signals, 12-in. bell with air ringer, fire extinguisher, sanders, sand boxes and extension lights.

The traction-motor gearing may be 68:15, 74:18 or 65:18 with continuous tractive force ranging from 46,000 lb. to 58,000 lb. and speeds of from 60 to 75 m.p.h.

All electrical equipment is supplied by the General



Speed-tractive force curve

Electric Company. The main generator (type GT-581) is directly connected to the Diesel engine. The exciter is mounted on the end of the main generator. Gear-driven from the exciter is an amplidyne machine designed for use with the power plant regulator. There is also an auxiliary generator mounted on the end of the main generator which is gear-driven from the main generator shaft. It supplies power for battery charging, lighting and control circuits and operates at constant voltage under control of a regulator.

The traction motors are four-pole, d.c. machines designed for operation with full or shunted field. The manufacturer calls attention to the fact that the motor is almost self protecting, since in many cases it allows operation up to the point of locomotive wheel slip without entering the range of short-time restrictions. New insulating materials used in the motor have increased the continuous current rating from 900 to 1,085 amp.

The motors are supported by the axles to which they are geared and by spring nose suspensions from the truck transoms. Wheel and axle assemblies are removable with the motors. Forced ventilation is obtained through flexible connections between ducts in the underframe and the motor frames.

The radiator fan, placed in an opening in the roof, is of the aphonic type, 60 in. in diameter, of welded structure, designed to operate efficiently with varying speeds. In the fan drive, there is an eddy-current clutch. This is placed between the engine and the right-angle drive gear box from which the vertical fan shaft is driven. Slip of the clutch is electrically controlled and is coordinated with the radiator shutter control.

The power-plant regulating system modulates the Diesel engine loading by controlling fuel to the Diesel engine and adjusting generator demand. It holds constant any preset engine speed by limiting engine torque and adjusting generator demand to the ability of the engine to deliver power at any moment and for any set speed.

Type P, single-end, single-unit control is used. Reversers and line contactors are electro-pneumatically operated. All other contactors are operated magnetically.

There are four traction-motor connections: series parallel full field, series parallel shunt field, parallel full field, and parallel shunt field. Manual transition of motor connections is used for the locomotives with four-wheel trucks; locomotives with six-wheel trucks used in passenger service are equipped with automatic transition. Manual, low-voltage switches, of the circuit-breaker type with reset feature, are used on auxiliary circuits wherever overload protection is required.

The contactor compartment which contains the electrical control equipment, including the engine starting switch, is located at the rear of the hood. The apparatus is accessible through doors in the wall of the operating cab and through panels in the front partition. Louvers allow for adequate ventilation. Switches and meters are contained in a panel mounted on the compartment wall at the front of the operating cab where they are accessible to the operator in the cab. Dynamic braking equipment, when used, is installed in the rear compartment.

The storage battery is a 32-cell, 426-amp.-hr. lead-acid type. It is installed in two battery boxes, one on either

GENERAL CHARACTERISTICS OF ALCO-G.E 1,600-HP. ROAD-SWITCHER

Builders' model number	RS-3
Class—AAR designation	B-B
Track gage, ft.-in.	4-8½
Diesel engine—one, vee-type, 12 cylinders, turbosupercharged, hp.	1,600
Height (maximum), ft.-in.	14-5⅛
Width (maximum), ft.-in.	10-0¼
Length (inside knuckles), ft.-in.	55-11¾
Wheel base:	
Each truck (rigid), ft.-in.	9-4
Total locomotive, ft.-in.	39-4
Wheels, drivers—4 pairs, in., diameter	40
Truck curvature:	
With train, deg.	21
Minimum radius, locomotive alone, ft.	150
Weights:	
On driving wheels, lb.	240,000
Total locomotive, lb.	240,000
Supplies, Total capacity:	
Lubricating oil, gal.	200
Fuel oil, gal.	800
Engine cooling water, gal.	250
Sand, cu. ft.	28

side at the rear of the operator's cab, above the underframe, with 16 cells in each box. A receptacle provides connection for charging the battery from an outside source.

All lights are connected to the storage battery through circuit breakers and light switches. There are lights in the operating cab on the ceiling, and on the gage panels. There are also lights in the engine, radiator and contactor compartments and receptacles for extension-light connections.

There is a headlight of the flush type with a 14-in. glass reflector at each end of the locomotive. They are fitted with 250-watt, 32-volt lamps, and have dimming control.

Numeral boxes with electric lighting are applied on each side of the hood at each end of the locomotive. There are four step lights, one at each corner of the locomotive, and two ground lights, one under each side of the operating cab, all controlled by switches in the cab.

Each cab is equipped with an electric cab heater which may be either a 1.5- or a 2.5-kw. unit. There is an electric cooler for drinking water.

Wayside Treatment for Steam Generator Water

The wayside method of proportioning treatment to feedwater for Diesel passenger locomotives has proved successful on the Lehigh Valley. During more than two years that the railroad has operated Diesels, no steam generator coils have been replaced because of waterside difficulties.

By automatically applying treatment to raw water by means of only four wayside treating plants, a minimum of supervision and maintenance is required, while complete control and regulation of treatment is accomplished much more easily than with any other known method of treatment.

The L.V., in preparing to place in service, in April, 1948, 14 passenger Diesel units each equipped with a 3,000-lb.-per-hr. Vapor-Clarkson steam generator, made an investigation of various water treatment methods being used, and results obtained, by a number of roads. This investigation revealed that most roads relied primarily on the pot-type feeder furnished with the generator or on a chemical pump aboard the Diesel to supply necessary treatment. The results, however, were inconsistent, and were shown to be proportional to the amount of supervision employed in following up the regular application of chemical and maintenance of the proportioning equipment.

Because this work had to be done for the most part aboard the Diesel, the required supervision was difficult and in many cases proper attention to water treatment at terminals was neglected in the rush to get other work done to avoid train delay.

The railroad's test department, as a solution, installed automatic wayside plants at Buffalo, N. Y., Sayre, Pa., Wilkes-Barre, and Oak Island (Newark), N. J. The installations were made by the National Aluminate Corporation.

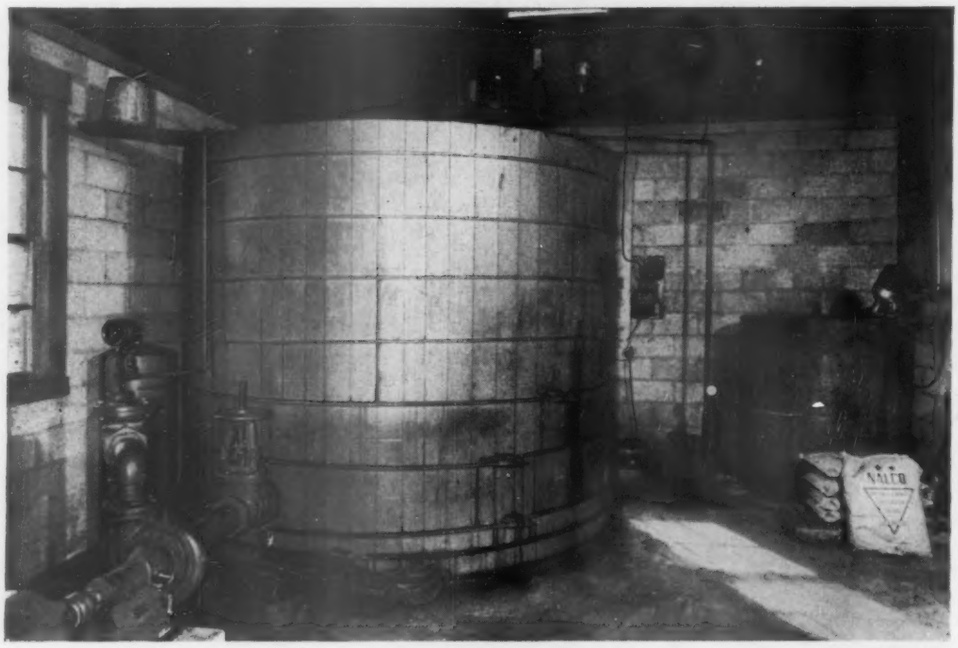
The treating-plant equipment at each station consists



The wayside treating plant at Sayre, Pa.



Hose connections to the water tanks on the locomotive



Storage and chemical tanks inside the building

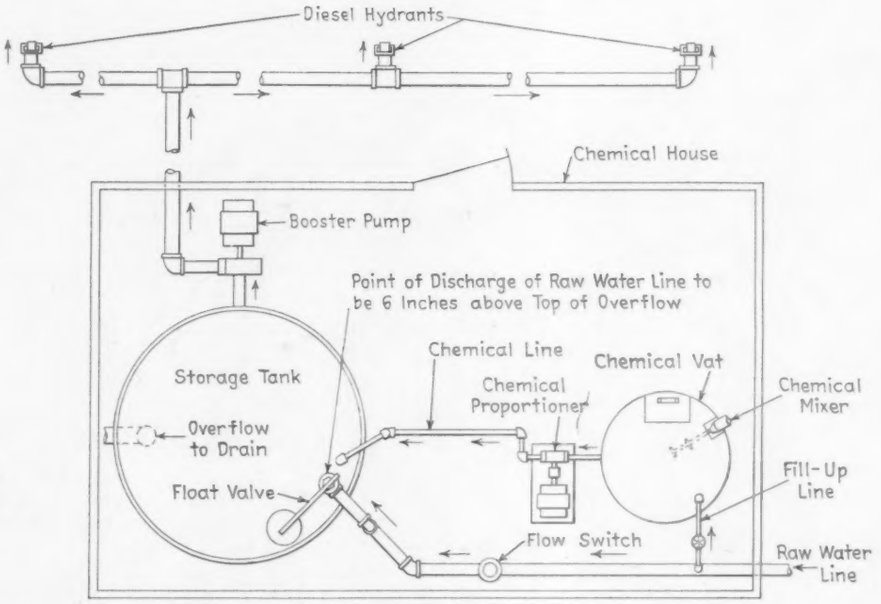
of a flow switch, chemical proportioning pump, a chemical vat and a mixer, a typical hook-up of which is shown in one of the drawings. The flow switch is installed in the line supplying water for the Diesel steam generators, and automatically actuates the chemical pump whenever water is taken aboard the Diesel. This pump proportions treatment solution to the water going to the Diesel so that all the steam-generator feedwater taken aboard the Diesel is properly treated. The treatment, furnished in dry powder form, is put in solution in the vat, which is of such size as to require recharging only once or twice a week, minimizing the attention required.

Where restrictions demanded that treated water be kept separate from raw water supply, a small storage tank and a booster pump were also installed. The raw water in this case is piped into the top of the tank and its level in the tank controlled by a float valve. The treatment solution is mixed with the water in the storage tank, being discharged into the top of the tank through a separate chemical line in the path of the water flow. The

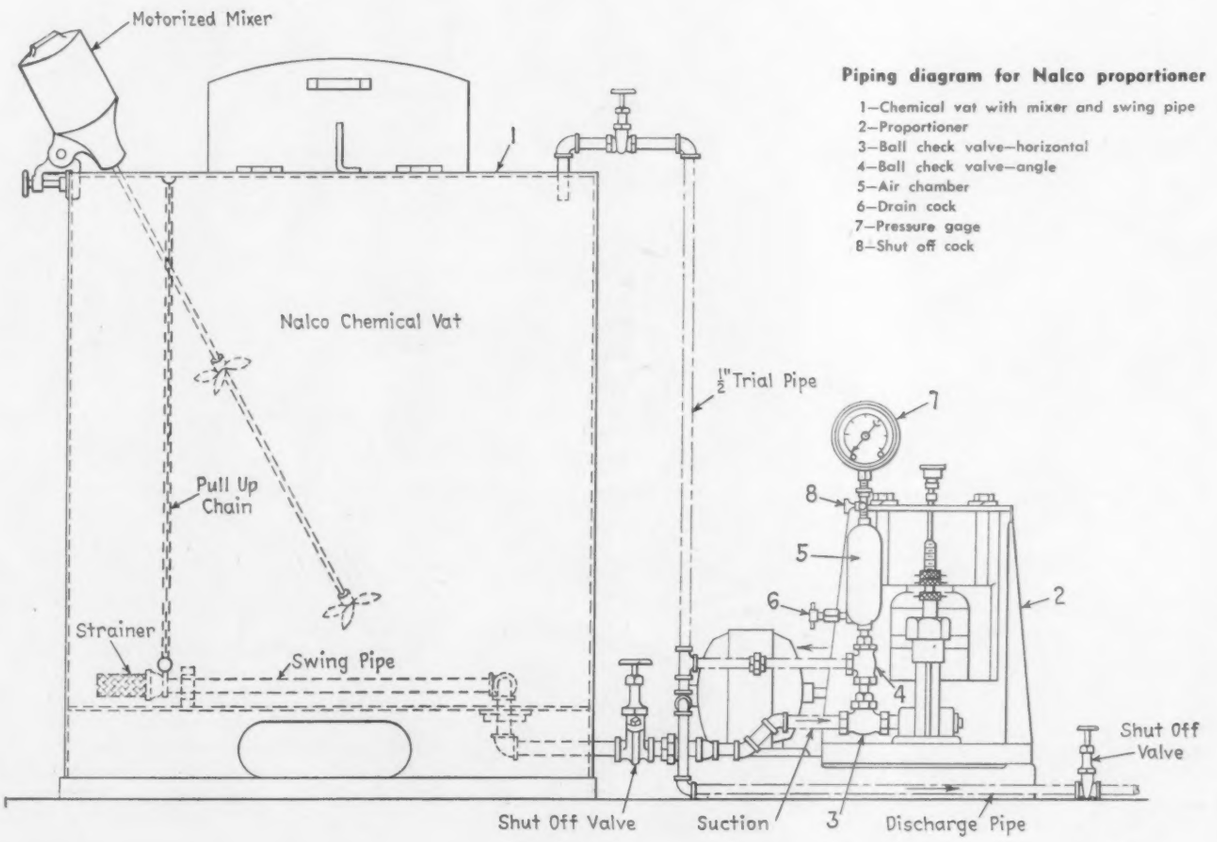
chemical pump is operated automatically by a flow switch installed in the raw-water line. The booster pump, which takes treated water from the storage tank, is controlled by switches located near the Diesel water hydrants.

The wayside treating of steam-generator feed water removes all work and supervision of treatment from the locomotive units and, in the case of the L. V., concentrates it at four water stations where proper chemical control is much more readily accomplished. Samples of treated water are easily obtained at each station, and regularly sent to the test department laboratory at Sayre for analysis. Any irregularity in treatment is immediately noted and quickly corrected. Occasional spot sampling of steam-generator boiler waters is made as another check that proper treatment is being maintained.

The treatment used is Nalco No. 54 pulverized.



Typical layout for treating feedwater where treated water must be kept separate from raw water



Piping diagram for Nalco proportioner

1—Chemical vat with mixer and swing pipe
2—Proportioner
3—Ball check valve—horizontal
4—Ball check valve—angle
5—Air chamber
6—Drain cock
7—Pressure gage
8—Shut off cock

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EVEN THOUGH you may not know that it is stronger for equal weight; *lighter* for equal strength; an *overwhelmingly superior* car end . . .

Why are you *confident* in selecting the IMPROVED DREADNAUGHT END?

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Taken at Dayton, Ohio

LIMA-HAMILTON SWITCHERS

...on the B&O

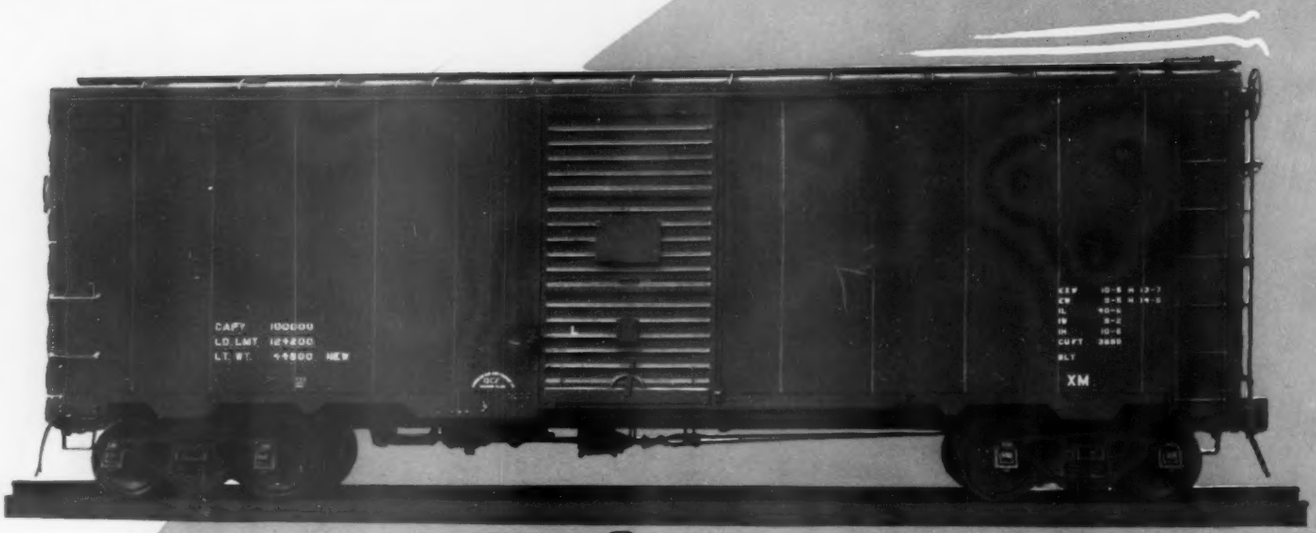
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says the B & O

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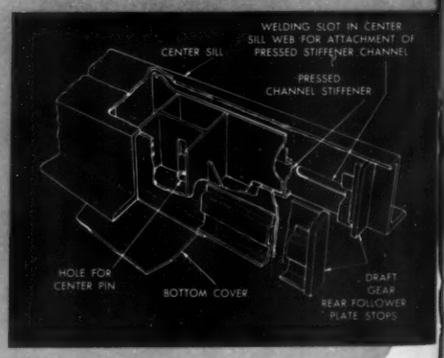
LIMA LOCOMOTIVE WORKS **LIMA, OHIO**

A division of the Lima-Hamilton Corporation



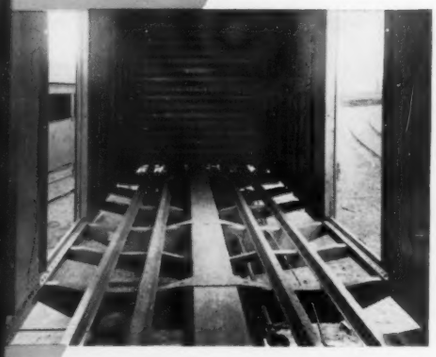
Interior of the standardized box car before lining is applied. Note the *extra* cross member at the door where most abuse occurs.

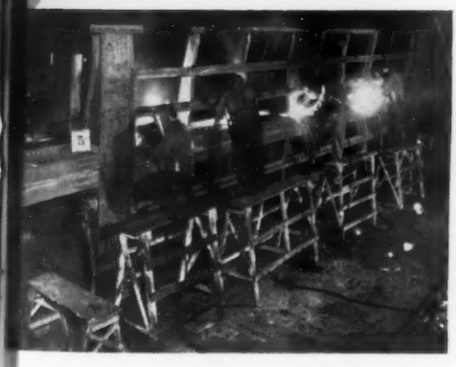
Note the unique design and construction of the G.C.F. combined bolster center filler and rear draft lug assembly of plates and shapes . . . jig clamped for precision-aligned welding.



In G.C.F. assembly-line production special machinery rotates the entire underframe to desired positions for "downhand" welding.

BALANCED OPERATING COSTS
with a.c.f. standardized design
FREIGHT CARS!





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Check carefully the advantages of better construction... faster delivery ... and greater efficiency offered by a.c.f. '*extra*-built'... standardized design freight cars. An a.c.f. representative can show you how to cut overhead and operating costs with the *right kind* of new car equipment that meets *all* requirements. American Car and Foundry Company, New York • Chicago • St. Louis • Pittsburgh • Philadelphia • Washington Cleveland • San Francisco.

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share one important thing between them . . .

the 24-RL

There is one vital piece of equipment that all modern road locomotives have in common—Westinghouse 24-RL Brake Equipment. Combining of various interchangeable sections provides a wide combination of functions, which completely meet the needs of all normal assignments.

The flexibility of the 24-RL is particularly helpful in cases where assignments have not been completely defined when locomotive construction starts. Selected sections can be inserted at any time. Substitutions may be made after locomotives are in service, with no change in basic piping, if changes in assignment make this desirable.

Several typical combinations, which suggest the broad possibilities of the 24-RL, are illustrated and described in Catalog No. 2058. A copy will be sent on request.





Westinghouse Air Brake Co.

WILMERDING, PA.



The division's new officers with its secretary, E. R. Ford. Left to right, Mr. Ford; J. W. Severs, first vice-chairman; I. V. Jessee, chairman; and Elmer Hart, second vice-chairman. Mr. Severs is vice-president of the Chicago, Milwaukee, St. Paul & Pacific; Mr. Jessee is comptroller of the Norfolk & Western; and Mr. Hart is comptroller of the Pennsylvania

Accounting Officers Urged To Work on Freight-Rate Problem

Canada's minister of transport puts it "at root of railway problem"; annual meeting at Ottawa also addressed by C.N.R. president and A.A.R. executives; Jessee elected chairman of division

Placing the problem of the freight-rate structure "at the root of the railway problem," Canada's minister of transport, Lionel Chevrier, last week told railroad accounting officers that they could make an "invaluable contribution" to its solution. Mr. Chevrier and Donald Gordon, chairman and president of the Canadian National, were the principal speakers at the annual meeting of the Accounting Division of the Association of American Railroads, which was held from July 31 through August 3 at the Chateau Laurier in Ottawa, Ont.

The freight-rate problem "is in no wise different in the United States than in Canada," the transport minister said. He called it "the most difficult problem facing the railways today," and suggested that it deserves the consideration of accounting officers because "the contribution of accounting data to the solution of railway problems has been tremendous both in your country and mine."

Mr. Gordon decided to give the delegates a change, since, as he said, "a change is as good as a rest." Instead of speaking about railroading, he talked about Canada "and the kind of people who occupy it." In the course of his address, however, he referred once to the government-owned railroad which he heads, saying that "within the scope of managerial responsibility, the Canadian National is not only operated in a manner compatible with the best principles of private operation but just as ably."

Fifty-Sixth Annual Meeting

The convention, the fifty-sixth annual meeting of railway accounting officers, was attended by 789 members and guests. Presiding was the division's chairman, George F. Glacy, vice-president of the Boston & Maine, who was also a speaker, delivering the customary chairman's address at the meeting's closing session. Other addresses were those of A.A.R. officers—E. H. Bunnell, vice-president in charge of the Finance, Accounting, Taxation, and Valuation Department, Robert S. Henry, vice-president in charge of the Public Relations Department, Walter J. Kelly, vice-president in charge of the Traffic Department, and J. Elmer Monroe, assistant vice-president and assistant director of the Bureau of Railway Economics.

Mr. Monroe's talk on "Wage Reporting" was one of four tied in with reports of the division's standing committees. The other three were "Waybill Revision in Central Consolidated Revising Bureaus," by W. H. LeValley, auditor of freight accounts, New York Central; "Simplification of Passenger Tariff and Divisional Publications," by H. J. Bearss, assistant general auditor, Union Pacific; and "Simplified Methods for Disbursement Accounting." The latter, prepared by R. V. Cole, auditor of disbursements, Southern Pacific, was read in Mr. Cole's absence by J. F. Riley, auditor of disbursements, B. & M. Also there were informal talks by representatives of the Interstate Commerce Commission—W. H. S. Stevens, director of the Bureau of Transport Economics and Statistics, and Cecil W. Emken, acting director of the Bureau of Accounts and Cost Finding. Among representatives of other government agencies at the meeting was F. C. Squire, railroad management's representative on the Railroad Retirement Board.

T. H. Cooper, vice-president and comptroller of the C.N., was chairman of the committee on arrangements for the meeting. Fifteen manufacturers of office machines, equipment and supplies staged the usual type



Canada's minister of transport, Lionel Chevrier, addressing the meeting. Behind him is George T. Carmichael, vice-president and executive assistant, New York, New Haven & Hartford, and a former chairman of the division



Donald Gordon, chairman and president of the Canadian National, addressing the meeting. Behind him is T. J. Tobin, vice-president and comptroller of the Erie, and a former chairman of the division

of exhibit which has long been a feature attraction at the division's conventions—exhibitors were Alexander & Alexander, Inc.; Burroughs Adding Machine Company; R. L. Crain, Ltd.; A. B. Dick Company; Thomas A. Edison, Inc.; Felt & Tarrant, Ltd.; Friden Calculating Machine Company; International Business Machines Corporation; McBee Company; Monroe Calculating Machine Company; National Cash Register Company; Remington Rand, Inc.; Royal Typewriter Company; Standard Register Company, and Sorter Graf Company.

In the annual election held at the meeting's closing session, I. V. Jessee, comptroller of the Norfolk & Western, was elected chairman to succeed Mr. Glacy. Mr. Jessee had been first vice-chairman. J. W. Severs, vice-president of the Chicago, Milwaukee, St. Paul & Pacific, was likewise moved up from the second to the first vice-chairmanship, and Elmer Hart, comptroller of the Pennsylvania, was elected second vice-chairman. This slate had been recommended unanimously in the report of a nominating committee of which J. J. Ekin, retired vice-president of the Baltimore & Ohio, was chairman. E. R. Ford continues as secretary. New York was selected as the place for the 1951 annual meeting, the fixing of the date being left to the committee on arrangements.

Transport Minister Chevrier opened his address with a reference to the "tremendous task" performed by railways of the United States and Canada during World War II. He went on to say that "because of the uncertainty of the international position, the railways of this continent may again be called upon to perform those tremendous tasks." If they are, Mr. Chevrier added, he knows of "no group in the economy of our two nations more ready and more willing to accept the challenge."

The Freight-Rate Problem

Leading into his discussion of the freight-rate problem, the transport minister made passing reference to what the public in the United States and Canada pays for railroad service, calling the annual outlay a "surprisingly small" part ("less than 5 per cent") of the two countries' national income. "Our two countries," he said, "are today spending a lesser share of their national income for railway service than at any time during the past two decades."

In view of that situation, and the "essentiality of the railways," Mr. Chevrier suggested that "one might well wonder why it is difficult to have a rate structure that will support the railway industry." For an answer, he went on to examine several factors in the situation, dealing in turn with the need of basic industries for relatively low freight rates and the limit which highway competition sets on railroad undertakings to balance such adjustments with relatively higher rates on commodities of greater value.

The possibility of the railroads being generally able to establish rates which "individually would cover total costs" seemed "negligible" to Mr. Chevrier. As to out-of-pocket rates, he pointed out that "no business can long function" if greater and greater proportions of its sales come to be made on an out-of-pocket basis. Thus he suggested a third possibility—a rate structure embodying individual rates "which would cover out-of-pocket costs and, in addition, make some contribution towards the overhead expenses."

In making the suggestion, Mr. Chevrier emphasized that he was dealing with the matter in a broad general way. He recognized that it was a "most complicated" matter which "requires most careful story." The "general objective," he stated in this way: "To minimize transportation costs and maximize the opportunity for national development; to overcome handicaps of geography and make development of natural resources economically feasible in all sections of the nations."

As to what should be done to achieve this objective, the transport minister listed first the provision of "adequate revenues" for the railroads, because they are "essential." "It may be," he added, "that a criterion of adequate railway earnings should be a fair return upon prudently invested capital. If this be so, then the capital on which earnings should be permitted for rate control must be carefully scrutinized, including the improvident investment and the effect of past subsidies—the object being to establish capital at a realistic figure. Furthermore, the target for a fair return should take into

account the security which would come from regulation."

On the matter of rail-truck competition, Mr. Chevrier thinks there should be worked out "a division of interest between highway and railway transport so that maximum benefits may result." He explained that "this does not contemplate guaranteeing, either by direct or indirect means, a benefit for one to the disadvantage of the other"; neither does it contemplate "arbitrary or restrictive measures for the protection of either means of transport." In the long run, "the greatest benefit will accrue from the use of the cheaper form of transport," the minister added.

He went on to call for the maintenance of the railway industry "at a high pitch of efficiency and effectiveness." He then said: "Railway efficiency is a product of many factors, some of which are beyond the control of its management. Unless we provide more suitable conditions, railway efficiency cannot be had."

This brought Mr. Chevrier to his suggestion that accounting officers can make an "invaluable contribution" toward solution of the freight-rate problem and difficulties flowing from it. "No one," he said, "will question the necessity for railway management of determining, in a precise way, the various factors entering into the cost of railway operation; and to be able to determine future policy one must necessarily be fully conversant with past and present costs."

Address of C.N.R. President

Before getting into that part of his address which told about Canada and its people, President Gordon of the C.N. raised a question as to the extent to which business men of his country and the United States have adjusted their sights "to the new measurements which the declining purchasing power of the dollar have produced."

"Once it is accepted," he said, "that a 1950 dollar is not the same unit of measurement as a 1939 dollar all sorts of complications arise about such things as appropriate depreciation charges, valuation of inventories, minimum levels of freight rates, the financing of pension plans, allowances for insurance, etc. As an analogy, try to think of adjustments which might be required if our standard 36-in. yardstick had shrunken to say 30 in. and we were still obligated to regard it as one yard. I suggest that there is a great need for the accounting profession to get together with the economist and statistician and see how the record can be made clear on this rather bewildering problem."

The pace of Canada's expansion during the past 12 years was described as "startling" by the C.N. president. Its 1949 volume of industrial production, he said, was 70 per cent above the 1937 level—"an increase greater than that recorded in any other country, including the United States." In spite of a substantial increase in the standard of living, he continued, Canada has managed to devote "an unusually high proportion (more so than the United States)" of its gross national income to capital investment. The proportion was 20 per cent in 1948, 21 per cent in 1949, "and it seems likely that the percentage will be even higher this year," Mr. Gordon added.

In closing he referred to the Korean war, which prompted him to suggest that "in these testing days when the very fundamentals of the faith by which we live are under challenge, we should not feel self-conscious about proclaiming our standards and finding virtue in them." He went on to advise that "if we are to fight for them we had best be sure of our code of principles and our understanding of the democratic process."

"We had best be sure," he added, "that we have a resolute confidence in these principles and in the institutions by which we live, for they are the rich heritage bequeathed to men of our generation. And we had best be sure that we are not only willing but *able* to beat the living daylights out of any group of evil men who profess a philosophy which is aimed at the destruction of that heritage. The paradox which is constantly before us is that those who love peace must be ready to fight and those who love freedom must accept discipline."

An Unused "Commercial"

A.A.R. Vice-President Henry discussed railroad capacity for a war-emergency job of transportation, his talk being along lines of the statement issued July 20 by the association's president, W. T. Faricy (see *Railway Age* of July 29, page 40), and like announcements which were issued following the special meeting of A.A.R. member roads at Chicago on July 28. Colonel



E. H. Bunnell (left), vice-president in charge of the Finance, Accounting, Taxation and Valuation Department, Association of American Railroads, and George F. Glacy, chairman of the division and vice-president of the Boston & Maine



T. H. Cooper (left), vice-president and comptroller, Canadian National, and chairman of the committee on arrangements for the meeting; and Canada's minister of transport, Lionel Chevrier

Henry also read to the accounting officers a "commercial" which had been scheduled for broadcasting during the July 24 "Railroad Hour," but which was displaced on the program by a statement relating to the railroad industry and the emergency situation.

The "commercial" called attention to the Ottawa meeting and described the railroad accountant as "the right hand of successful management—the fact-finder for the entire organization." It went on to point out that railroads "pioneered in the adoption, use and development of standard documents and forms, and of modern machine methods of keeping accounts and records." This development "has been carried forward by the railroads, cooperatively, through the work of the Accounting Division," the "commercial" continued. As a result, it added, "efficiency is increased, costs of providing transportation service are kept at a minimum, and you enjoy rates lower than they would otherwise be."

Division Chairman Glacy referred briefly to the evolution of railroad accounting departments into effective aids to management and to the dependence of present-day accounting on machine methods. He noted that accounting departments still have routine functions to perform, but he asserted that "no railroad accounting department rises to its highest usefulness until it becomes, within its own proper field, a fact-gathering, a fact-analyzing and a fact-interpreting department."

Opportunity for Accounting Officers

Among opportunities which lie ahead for the accounting department, Mr. Glacy singled out for emphasis the opportunity "to integrate its skill with that of the engineering, operating and mechanical departments so that benefits of improvements may be accurately analyzed and predicted when still in the blueprint stage." In this way, he explained, "plans may be more realistically analyzed, developed and improved, and progress carried out in the most logical order."

Meanwhile, Mr. Glacy had asserted that a railroad "to be physically strong must be financially strong." He added that "it must be in a position to make the sort of living that will enable it to attract investors and it must be in a position to purchase the equipment it needs."

"A large volume of traffic," Mr. Glacy continued, "is necessary to achieve the greatest efficiency because the railroad as a machine is set up and geared for production of mass transportation. With enough work to do there is no agency of transportation on earth that can compete with the railroad industry in all-around efficiency. With too little work to do no amount of efficiency in operation can prevent distressing results. However, volume of traffic in itself is not enough. The traffic must yield revenue that will make it possible for the railroads not only to meet all their costs, but also to pay their investors a fair and reasonable return on their money."

The address of A.A.R. Vice-President Bunnell was a brief statement setting out the program his department has planned for the immediate future. He also stated that he had the pledge of the division's new chairman, Mr. Jessee, "to continue concentrating our attention on the further extension of the use of office mechanical devices and on streamlining methods and, procedures in our accounting and statistical work, looking towards further economies as well as rendering more and more effective aid to management."

As to the future plans of the A.A.R. department which he heads, Mr. Bunnell listed: (1) To complete the reports of the Accounting Committee on Research; (2) to then appoint a small committee of accounting officers to work jointly with committees to be appointed by the Operating-Transportation Division and Car Service Division in connection with matters pertaining to car movements and related accounting and statistics; (3) to appoint another small committee to work with the Freight Station Section of the Operating-Transportation Division "to devise further improvement in waybilling practices and in preparation of freight bills and tariff publications"; (4) to collaborate with territorial passenger associations in studying the possibility of devising new ticket forms, ticket sales devices, and improvement in sales practices, both local and interline; (5) to promote the study and interest of accounting officers in improvement in timekeeping and labor distribution methods, using punch cards and tabulating equipment, through the extended development of the "mark sensing" method, "which also might later be applied advantageously to maintenance of way as well as some other departments."

A.A.R. Vice-President Kelly discussed various matters in which traffic and accounting officers both have interests. Among such matters is publication of the uniform classification and uniform class-rate scale ordered by the I.C.C. in the Nos. 28310 and 28300 cases. Mr. Kelly predicted that these tariffs would be published in the near future; and expressed his hope that then many current tariff problems "will be behind us."

As to the work of reissuing tariffs to pick up the general "Ex Parte" freight-rate increases, Mr. Kelly said it is "well under way." He explained that "necessarily" this has been a "slow process," because the increases disturbed many commodity groups and territorial groups. Nevertheless, he expects the work to be completed next year—unless there is another general rate increase.

Calls for Accurate Wage Reporting

In his address on "Wage Reporting," Assistant Vice-President Monroe of the A.A.R. stressed, amidst other comment, the "error and confusion" which arises from various methods employed in the calculation of hourly earnings of railroad employees. He insisted that such earnings are properly determined by dividing the straight-time compensation by the straight time actually worked; and he called upon the I.C.C.'s Bureau of Transport Economics and Statistics to do something to clarify this and other phases of wage statistics.

"I believe," Mr. Monroe said, "that the bureau, the organization engaged in the first instance in collection and compilation of the basic data, could perform a real service in this connection—such a service to consist of preparation and issuance of a memorandum explaining how railroad wage statistics are compiled and the significance of each item reported. It should also outline the formula for calculating hourly, weekly, monthly, and annual earnings of railroad workers. Especially important would be an explanation of the difference between a contract hourly rate of pay and the hourly earnings of certain classes of employees. . . .This would go a long way towards clarifying a situation that is in some respects chaotic, and is certainly confusing and misleading."

The report of the division's general committee was briefed at the meeting by Secretary Ford, while like summaries of reports of the various other standing committees were presented by their respective chairmen. These reports were printed in full in the "Agenda," a document of 379 pages, which had been distributed before the meeting. Thus the detailed committee action is not reported here. All committee reports were received without debate, and but few modifications of the agenda's texts were announced by the committee chairmen.

Work at CONEMAUGH DAM helps prove

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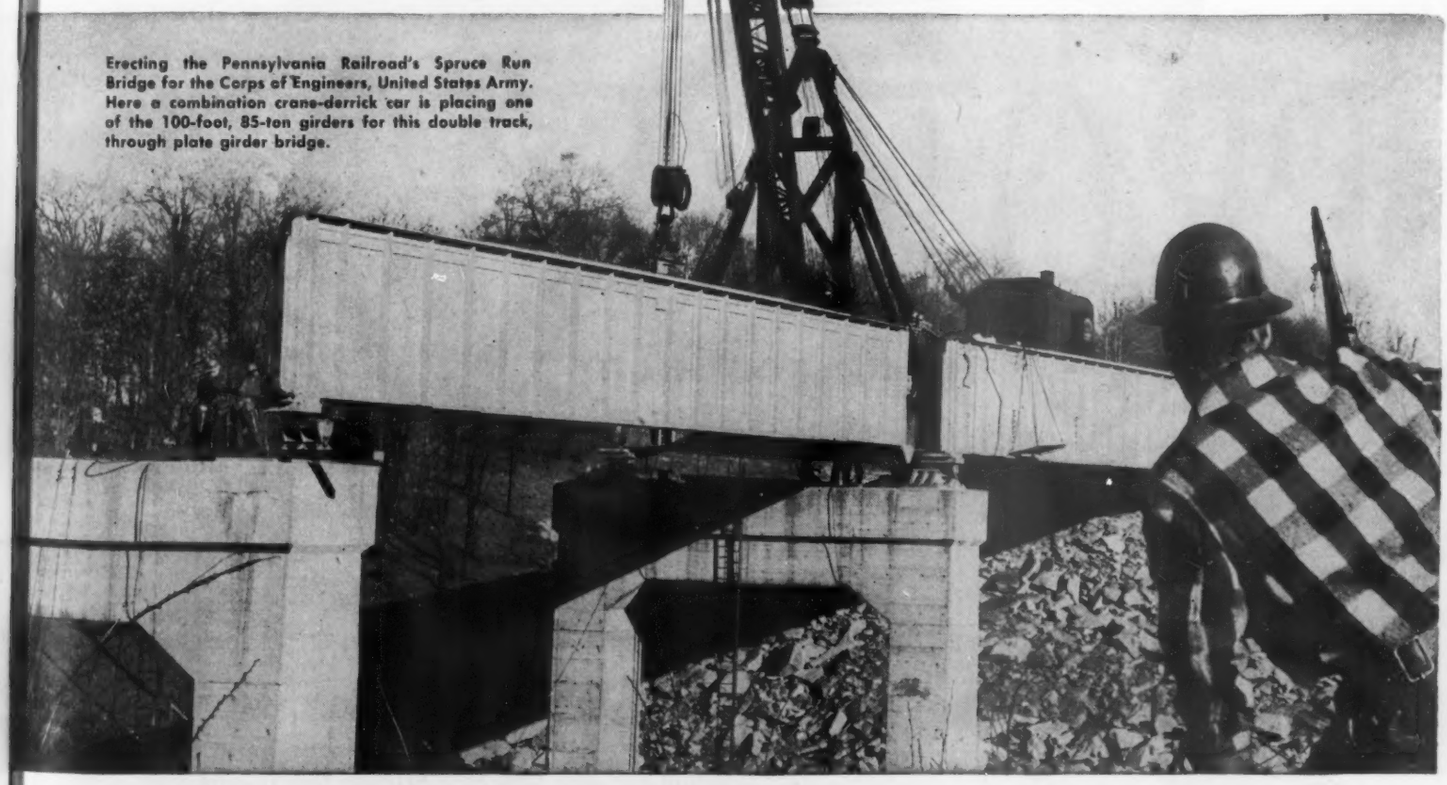
= a job done *Right*

AMERICAN Bridge Company undertook a major project involved in the relocation of the Pennsylvania Railroad's tracks to prepare for the building of the Conemaugh Dam, a flood control project for the Ohio River Valley.

American Bridge fabricated and erected the five double track spans and three underpasses on this project, involving approximately 7,000 tons of structural steel.

We cite this project as additional proof that where you see the sign "Fabricated and Erected by American Bridge Company," you'll see a job done efficiently.

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UNITED STATES STEEL EXPORT COMPANY, NEW YORK



Erecting the Pennsylvania Railroad's Spruce Run Bridge for the Corps of Engineers, United States Army. Here a combination crane-derrick car is placing one of the 100-foot, 85-ton girders for this double track, through plate girder bridge.

USS AMERICAN BRIDGE
UNITED STATES STEEL

MAXIMUM



PROTECTION

in all respects

CARDWELL Friction Bolster Spring for A.A.R. and Long-Travel Springs



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Cardwell and Westinghouse shock-absorbing devices protect rolling stock against excessive horizontal, vertical, lateral and angular forces. They are designed with a high factor of safety, resulting in capacities well above the requirements.

Over 98% of the cars in freight carrying service are A. A. R. construction and over 96% have Friction Draft Gears.

Cardwell Westinghouse Co., Chicago
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Five Month Purchases Reach $1 Billion

Equipment orders lead the way with May orders $94 million—Other purchases show steady rise since first of year

Large equipment orders during the first five months of 1950 have been mainly responsible for sending railroad purchases for that period close to the $1 billion mark. May orders for equipment, which included 11,636 freight cars (estimated cost $58,180,000), 8 rail-Diesel cars (cost $1,064,000), and 245 Diesel-electric locomotive units (estimated cost $35,200,000), accounted for almost a third of the value of equipment ordered to date. Other purchases, although not up to the level of recent years, also are on an upward trend, with May purchases of materials, supplies and fuel more than $27 million above the January figure of $121 million. Buying of products of manufacturers in May was up 33 per cent from January expenditures for similar material.

1950 RAILWAY PURCHASES*

	May (000)	Five Month Totals 1950 (000)	Five Month Totals 1949 (000)
Equipment**	$ 94,444	$338,855	$ 36,240
Rail	9,642	40,596	47,179
Crossties	4,892	22,581	37,597
Other Material	84,540	356,800	454,636
Total from Manufacturers	$193,518	$758,832	$575,652
Fuel	49,599	240,526	283,828
Grand Total	$243,117	$999,358	$859,480

*Subject to revision
**Amount placed on order

Despite the drop in inventories during the month of April, which amounted to $9 million from the April 1 figure, inventories seem to have reached a period of stabilization, although conditions soon may cause them to rise again.

MAY* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)

Year	May '50 Compared to Other Mays (000) Amt.	% Change	Month	May '50 Compared to Other Months '49 and '50 (000) Amt.	% Change	Year	Five Month Totals '50 And Other Years (000) Amt.	% Change
1944	$87,044	+ 14	Jan. '49	$110,271	— 10	1944	$416,341	+ 1
1945	81,481	+ 22	Apr. '49	107,451	— 8	1945	403,090	+ 4
1946	81,891	+ 21	Jan. '50	74,314	+ 33	1946	380,213	+ 10
1947	105,379	— 6	Feb. '50	72,304	+ 37	1947	503,334	— 17
1948	105,076	— 6	Mar. '50	87,984	+ 13	1948	536,008	— 22
1949	102,473	— 3	Apr. '50	86,301	+ 15	1949	539,412	— 22
1950	99,074		May '50	99,074		1950	419,977	

MAY* PURCHASES OF RAIL

Year	May '50 Compared to Other Mays (000) Amt.	% Change	Month	May '50 Compared to Other Months '49 and '50 (000) Amt.	% Change	Year	Five Month Totals '50 And Other Years (000) Amt.	% Change
1944	$6,188	+ 56	Jan. '49	$7,407	+ 30	1944	$32,750	+ 24
1945	5,184	+ 86	Apr. '49	10,885	— 11	1945	29,032	+ 40
1946	4,968	+ 94	Jan. '50	8,806	+ 9	1946	20,356	+ 99
1947	6,972	+ 38	Feb. '50	6,444	+ 50	1947	35,271	+ 15
1948	6,841	+ 41	Mar. '50	7,669	+ 26	1948	37,095	+ 9
1949	9,868	— 2	Apr. '50	8,035	+ 20	1949	47,179	— 14
1950	9,642		May '50	9,642		1950	40,596	

MAY* PURCHASES OF CROSSTIES

Year	May '50 Compared to Other Mays (000) Amt.	% Change	Month	May '50 Compared to Other Months '49 and '50 (000) Amt.	% Change	Year	Five Month Totals '50 And Other Years (000) Amt.	% Change
1944	$7,410	— 34	Jan. '49	$7,473	— 35	1944	$35,095	— 36
1945	6,484	— 25	Apr. '49	7,758	— 37	1945	28,731	— 21
1946	7,915	— 38	Jan. '50	3,823	+ 28	1946	35,566	— 37
1947	8,441	— 42	Feb. '50	3,985	+ 23	1947	40,107	— 44
1948	6,137	— 20	Mar. '50	4,984	— 2	1948	28,211	— 20
1949	7,669	— 36	Apr. '50	4,897	——	1949	37,597	— 40
1950	4,892		May '50	4,892		1950	22,581	

*Subject to revision

MAY* PURCHASES OF OTHER MATERIAL

May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)			Five Month Totals '50 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1944	$73,446	+ 15	Jan. '49	$95,391	— 11	1944	$348,496	+ 2
1945	69,813	+ 21	Apr. '49	88,808	— 5	1945	345,327	+ 3
1946	69,008	+ 23	Jan. '50	61,685	+ 37	1946	324,291	+ 10
1947	89,966	— 6	Feb. '50	61,875	+ 37	1947	427,956	— 16
1948	92,098	— 8	Mar. '50	75,331	+ 12	1948	470,702	— 24
1949	84,936	——	Apr. '50	73,369	+ 15	1949	454,636	— 22
1950	84,540		May '50	84,540		1950	356,800	

MAY* PURCHASES OF FUEL

May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)			Five Month Totals '50 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1944	$51,039	— 3	Jan. '49	$65,368	— 24	1944	$256,353	— 6
1945	48,638	+ 2	Apr. '49	50,062	— 1	1945	233,952	+ 3
1946	30,280	+ 64	Jan. '50	46,700	+ 6	1946	214,151	+ 12
1947	52,469	— 5	Feb. '50	34,823	+ 42	1947	278,726	— 14
1948	72,968	— 32	Mar. '50	56,725	— 13	1948	343,820	— 30
1949	52,615	— 6	Apr. '50	52,679	— 6	1949	283,828	— 15
1950	49,599		May '50	49,599		1950	240,526	

MAY* TOTAL PURCHASES (Excl. Equip.)

May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)			Five Month Totals '50 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1944	$138,083	+ 8	Jan. '49	$175,639	— 15	1944	$672,694	— 2
1945	130,119	+ 14	Apr. '49	157,513	— 6	1945	637,042	+ 4
1946	112,171	+ 33	Jan. '50	121,014	+ 23	1946	594,364	+ 11
1947	157,848	— 6	Feb. '50	107,127	+ 39	1947	782,060	— 16
1948	178,044	— 16	Mar. '50	144,709	+ 3	1948	879,828	— 25
1949	155,088	— 4	Apr. '50	138,980	+ 7	1949	823,240	— 20
1950	148,673		May '50	148,673		1950	660,503	

MAY* INVENTORIES OF RAIL

May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
May 1, 1944	$23,081	+ 69	Jan. 1, '49	$33,243	+ 17
1945	26,057	+ 49	Apr. 1, '49	42,681	— 9
1946	24,119	+ 61	Jan. 1, '50	31,926	+ 22
1947	26,875	+ 45	Feb. 1, '50	36,893	+ 6
1948	31,911	+ 22	Mar. 1, '50	40,594	— 4
1949	41,264	— 6	Apr. 1, '50	41,482	— 6
1950	38,941		May 1, '50	38,941	

MAY* INVENTORIES OF SCRAP

May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
May 1, 1944	$10,319	+ 38	Jan. 1, '49	$18,849	— 24
1945	10,414	+ 37	Apr. 1, '49	18,872	— 24
1946	10,959	+ 30	Jan. 1, '50	14,874	— 4
1947	12,766	+ 12	Feb. 1, '50	14,840	— 4
1948	16,217	— 12	Mar. 1, '50	12,922	+ 10
1949	17,936	— 20	Apr. 1, '50	14,147	+ 1
1950	14,269		May 1, '50	14,269	

MAY* INVENTORIES OF CROSSTIES

May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
May 1, 1944	$80,463	+ 23	Jan. 1, '49	$94,256	+ 5
1945	74,792	+ 33	Apr. 1, '49	101,987	— 3
1946	77,413	+ 28	Jan. 1, '50	101,393	— 2
1947	89,906	+ 10	Feb. 1, '50	102,491	— 3
1948	92,711	+ 7	Mar. 1, '50	105,934	— 6
1949	101,641	— 2	Apr. 1, '50	106,269	— 7
1950	99,118		May 1, '50	99,118	

MAY* INVENTORIES OF FUEL

May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
May 1, 1944	$51,320	— 15	Jan. 1, '49	$96,900	— 55
1945	51,236	— 15	Apr. 1, '49	82,014	— 47
1946	42,918	+ 2	Jan. 1, '50	48,928	— 11
1947	55,973	— 22	Feb. 1, '50	45,969	— 5
1948	62,094	— 30	Mar. 1, '50	39,369	+ 11
1949	81,686	— 47	Apr. 1, '50	42,492	+ 3
1950	43,695		May 1, '50	43,695	

MAY* INVENTORIES OF OTHER MATERIAL

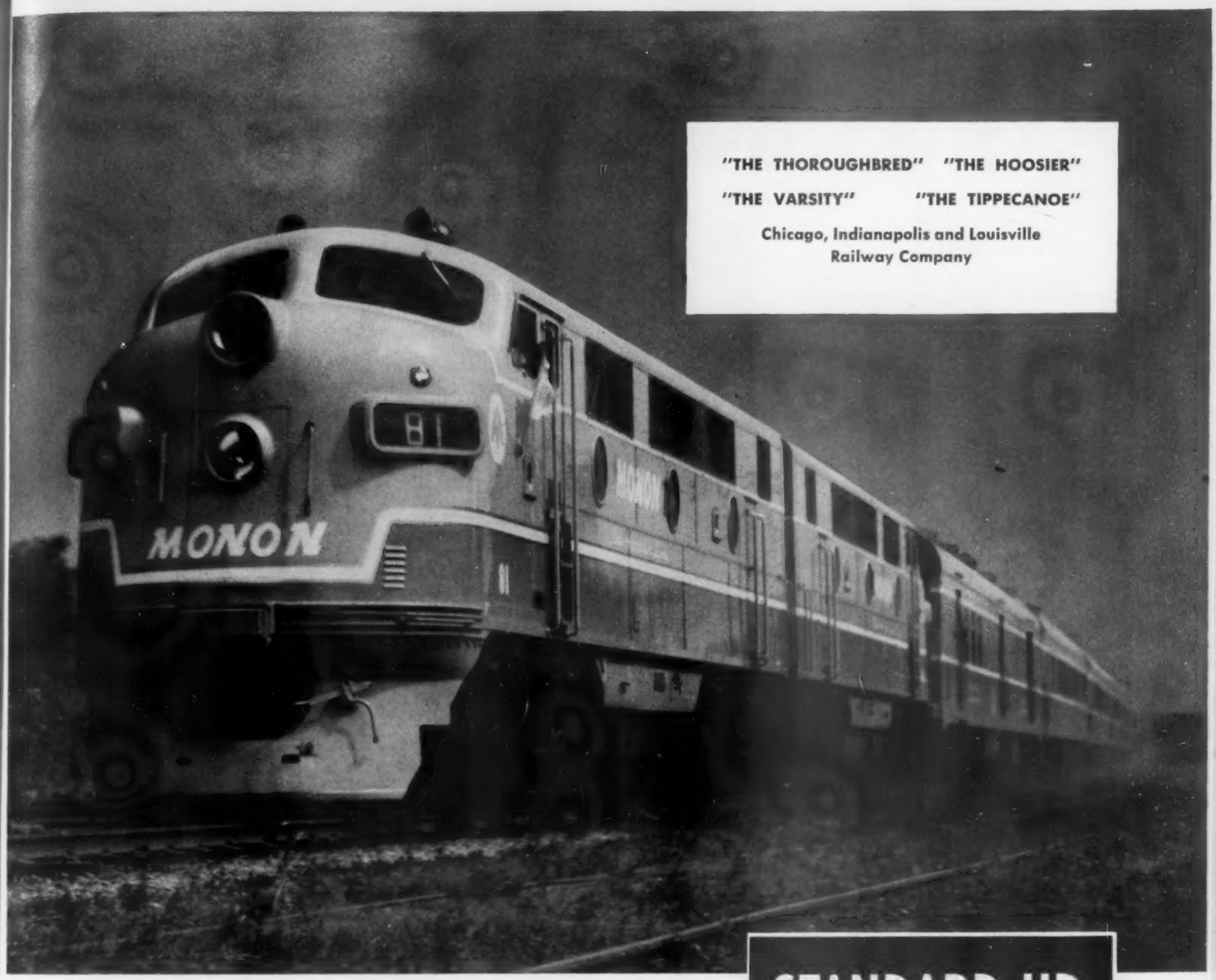
May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
May 1, 1944	$410,114	+ 27	Jan. 1, '49	$611,864	— 15
1945	448,326	+ 16	Apr. 1, '49	647,641	— 20
1946	452,861	+ 15	Jan. 1, '50	528,400	— 1
1947	535,071	— 3	Feb. 1, '50	526,201	— 1
1948	603,972	— 14	Mar. 1, '50	525,771	— 1
1949	642,872	— 19	Apr. 1, '50	521,506	——
1950	520,845		May 1, '50	520,845	

MAY* TOTAL INVENTORIES†

May '50 Compared to Other Mays (000)			May '50 Compared to Other Months '49 and '50 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
May 1, 1944	$575,297	+ 25	Jan. 1, '49	$855,112	— 16
1945	610,825	+ 17	Apr. 1, '49	893,195	— 20
1946	608,270	+ 18	Jan. 1, '50	725,521	— 1
1947	720,591	— 1	Feb. 1, '50	726,394	— 1
1948	806,905	— 11	Mar. 1, '50	724,590	— 1
1949	885,399	— 19	Apr. 1, '50	725,896	— 1
1950	716,868		May 1, '50	716,868	

*Subject to revision

†All total inventory figures taken from I.C.C. statement M-125 for the month indicated



Four great "name" trains on the *MONON* use . . .

STANDARD HD
TRADE MARK
Diesel Oil

ONE of the first completely Dieselized railroads in America, The MONON, has continuously forged ahead in its efforts to give Indiana fast, modern service. Typical of its progress are these four great "name" trains: "The Hoosier," "The Varsity," "The Thoroughbred," and "The Tippecanoe." In the locomotives assigned to these trains, STANDARD HD Diesel Oil is contributing to the efficient operation of The Hoosier Line.

The Chicago, Indianapolis and Louisville Railway Company is one of the more than 60 railroads that now use STANDARD HD on their heaviest passenger and freight runs. This acceptance indicates the ability of STANDARD HD to provide efficient and economical lubrication for all types of Diesel locomotives. Make this wide-spread success your basis for investigating STANDARD HD Diesel Oil. A Standard Oil Railway Department representative can help you.

Standard Oil Company (Indiana), 910 South Michigan Avenue, Chicago 80, Illinois.

STANDARD OIL COMPANY (INDIANA) STANDARD

New and Improved Products of the Manufacturers

NATHAN DEVELOPS AIRCHIME WHISTLE

The Nathan Airchime whistle—application of which to Diesel-electric locomotives was reported in *Railway Age* of March 25—is basically a musical instrument, each horn of which emits a single tone of pre-determined pitch or frequency. The tone is produced by a circular diaphragm, or reed, which is vibrated by compressed air to prepagate sound waves, the pitch or frequency of the tone being determined by the size of the bell and the natural period of vibration of the diaphragm.

To obtain the flute-like tone quality of the steam whistle the inside of the resonator or bell follows a specially designed contour which controls resonances only to the fundamental frequency of the vibrating diaphragm and the first two octave overtones. All parts of the whistle structure must be sufficiently heavy and rigidly constructed to prevent the introduction of metallic harmonics with consequent change in tone quality.

The Nathan Airchime whistle is built in various combinations of bells to produce single- or multiple-tone whistles. The body is composed principally of four major parts or assemblies: the bell (1), base (14), diaphragm head assembly (7), and the diaphragm assembly (9). The base provides a mounting flange for the entire whistle assembly and serves essentially as a manifold for the various bells and diaphragm head assemblies.

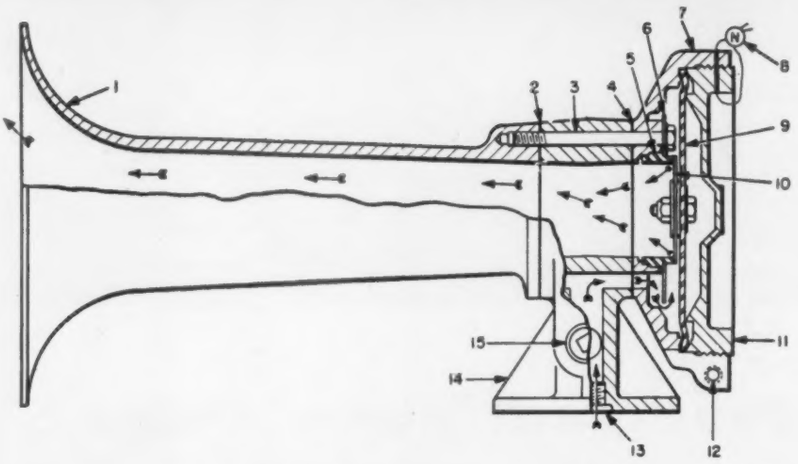
The bell and diaphragm head are secured to opposite faces of the base by three bolts (3) which also hold the diffuser ring (6) in place. The ring in turn secures the circular clapper seat (5) in a recess in the diaphragm head (7). To prevent leakage of air, gaskets (2) and (4) separate the bell and the diaphragm-head assemblies from the base. The diaphragm assembly, composed of phosphor bronze diaphragm discs (9), a clapper disc (10), and spacers, is secured in the diaphragm head by the adjusting cap (11). This cap screws into the diaphragm head, tightening the diaphragm against a circular land in the diaphragm head. After positioning the adjusting cap to maintain proper tension on the diaphragm, the clamp screw (12) through the split bracket at the bottom of the diaphragm head is tightened, locking the adjusting cap in position. Finally, to prevent change of adjustment, the diaphragm head and adjusting cap are drilled, lock-wired, and sealed.

An air-inlet port in the bottom of the mounting flange as well as two alternate ports on opposite sides of the stanchion above the mounting flange provide connections for the air-supply line. The whistle is sounded by admission of air through a valve in the air-supply line. The intensity of the signal can be modulated for terminal or suburban service. The whistle produces its full intensity of sound at an air pressure of 100 lb. per sq. in., at which pressure it is said to have a decibel rating equivalent to, or greater than, a similar steam chime whistle operated on 200 lb. per sq. in. of steam pressure, and a coverage to the rear usually greater than that of steam whistles.

For modulated tone, the minimum air pressure at the base of the whistle while blowing is 20 lb. per sq. in. A double-stem whistle valve provides a means in a single unit for selecting either loud or modulated tones.

The Airchime is a development based on a study made by the British Columbia government through its chief inspector of railways, Robert E. Swanson, because of complaints at the lack of distinction between the horns on Diesel locomotives from steamship whistles and the horns on highway vehicles. The whistles are produced by the Nathan Manufacturing Company, 416 East 106th street, New York 29, in single-tone, three-tone, and five-tone combinations.





MACHINE APPLIES RAIL-JOINT PLUGS

The Dearborn Chemical Company, Chicago, has recently developed a track-mounted machine for plugging the openings at the ends of joint bars

More lives than a CAT!



The friction shoes in the bolster pockets of Barber Stabilized Trucks will eventually wear out—*but only after many years of exceptional service.*

The Truck is designed so that the friction shoes are the easiest parts to renew. Just drop out the "old shoes", replace with "new shoes" and your truck is "shod" for many more years of unsurpassed truck, car, and lading protection.

The side springs carry their share of the load, thus adding to the capacity of the Barber Truck.

5229

STANDARD CAR TRUCK COMPANY
332 SOUTH MICHIGAN AVENUE, CHICAGO, ILLINOIS

with this company's NO-OX-ID Joint Bar Filler. The purpose of the filler is to seal the openings against the entrance of debris, brine, sand and water and thus protect the brushed-on rust-preventive rail lubricant from weathering or abrasive wear.

The joint bar filler is plastic and can be applied by hand but its elasticity is such that it is difficult to do this without introducing air pockets which later may render the plugs ineffective. The machine overcomes this difficulty and forces the material into the openings so that it penetrates about 3½ in. and keys around the first bolt, thus preventing the plug from being dislodged or falling out.

The machine has been designed for plugging the joint openings on both the field and gage sides of a rail at one pass, and applies the material at both ends of one joint bar simultaneously. It is of simple mechanical design and can be handled and operated by three trackmen. Its major elements are two pressure cylinders which are mounted on one side of a steel-framed push car. In use, each cylinder is filled with the joint bar filler which, in being applied to the joints, is extruded through an orifice at the bottom by means of a hand crank and a worm-and-gear mechanism at the upper end of the cylinder. The orifices of the cylinders face each other and come in various sizes to correspond roughly to that of the openings between the joint bars and the rail.

The cylinders are so connected to each other that they can be caused to move toward or away from each other, as required by the length of the joint, and the cylinder orifices locked in place at the ends of a joint bar. Experience has shown that forcing about 7½ oz. of material into the opening at each end of the bar is sufficient to cause the plug to be keyed around the end bolt. This amount of material is extruded by three turns of the crank, the number of revolutions of which is controlled by a counting device to preclude wasting the material. This machine will be made available to railroads using the joint bar filler material.



Sufficient material is forced into each opening to key around the first bolt



The filler material is extruded into the joint openings through orifices at the bottoms of the cylinders by three turns of the hand cranks

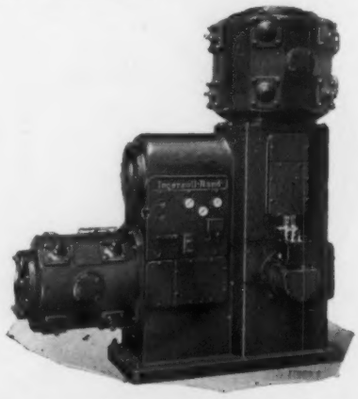
STATIONARY COMPRESSOR

A "new look" in air-compressor design has been incorporated in a line of modern, packaged-type, heavy-duty electric-driven compressors, recently announced by Ingersoll-Rand Company, New York. Sizes range from 125 hp. to 350 hp. for continuous full-load service and two-stage compression to 80-125 lb. per sq. in. discharge pressures. The manufacturer stresses simplicity of design, operation, and maintenance, as well as operating economy and compactness.

Designated as Model XLE, this new design embodies a single, vertical low-pressure compressor cylinder, a horizontal high-pressure cylinder, and a synchronous motor mounted directly on the crankshaft. It is said to require a small foundation, and is engineered with many innovations.

One new feature is known as "pipeless, thru-frame air flow," in which air enters and leaves the compressor through main air connections on the frame, instead of on the cylinders, and is led to and from both cylinders and intercooler through large passages within the frame itself. There is no interstage piping or cylinder strain due to air piping. The intercooler is said to require only one-fourth the space of conventional coolers and fits entirely within the same frame. As a result, the compressor is reported as being more streamlined, with a sturdy, well-ribbed structure that makes the unit radically different in appearance, strong and rigid, easy to install and to clean.

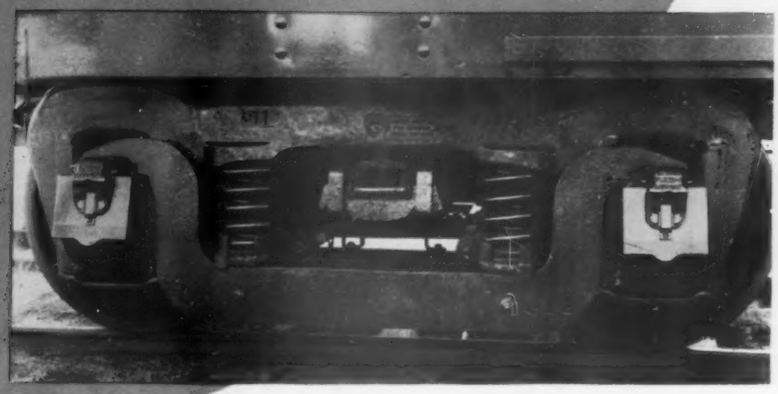
All bearings in the XLE are full-floating and rotate freely. Main and crankpin bearings are of aluminum alloy. Pressure lubrication in a sealed, dust-tight crankcase is employed. The crankcase need not be opened for bearing adjustment and this construction is said to result in cool-running bearings, long trouble-free service, and less maintenance.



The Ingersoll-Rand Model XLE stationary compressor is compact in design and is engineered with many innovations

---

"Both houses of Congress currently are studying in committee the need for possible revision of the national transportation policy. . . . These are matters worthy of deliberation, and all interests are being heard. *But the same Congress in its appropriation measures is proposing Federal expenditures of almost* $1,000,000,000 *next fiscal year for aid to aviation, highways and waterways.* The railroads, which want and ask no such federal help, will continue to pay their own way as long as they can, at the same time pay a portion of the taxes which support their competitors."—*New York Herald Tribune.*



Latest Type COMMONWEALTH BOX-EXPRESS CAR TRUCKS



Missouri Pacific Box-Express Car
with latest type Commonwealth BX Trucks

Offer Many Advantages For Commodity Cars In Passenger Train Service . . .

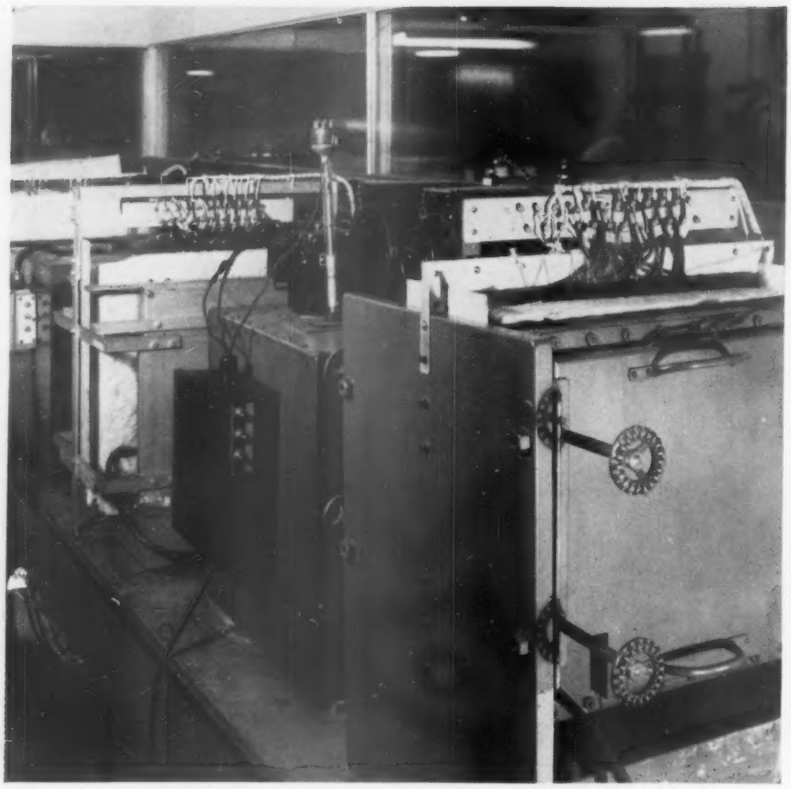
Especially designed to meet the demand for a safe, rugged, practical, light-weight truck for Box-Express Cars operating in passenger train service, this newest type COMMONWEALTH Equalized Swing-Motion Truck provides a smoother riding car with greatly reduced maintenance costs.

The swing bolster arrangement permits effective lateral control, assuring smoother riding with less shock and damage to car contents, car body and track structure. One-piece cast steel truck frame with integral pedestals provide long, dependable service life.

For true economy and dependability it will pay you to apply COMMONWEALTH BX Trucks to your express, refrigerator and merchandise cars in passenger train service.

GENERAL STEEL CASTINGS

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At the Fiberglas Research Laboratories three standard hot plates are in 24-hour use, measuring the thermal conductivity of Fiberglas products as they come from production lines.

Insulation Progress

From One of America's Great Research Laboratories

America's eating habits are changing. New means are needed to implement the change. New products, or improved old ones, must pace the advance. In the insulation of food in transport, the job of pushing back the technical frontiers is accepted as a challenge by the great Research Laboratories of the Owens-Corning Fiberglas Corporation.

Here the "candidate" products are tested. Here standards are set, and exceeded. Here the glass fiber product of tomorrow is proved.

No matter what insulation product you buy that contains a Fiberglas* material, its glass fiber in that same fabricated form has passed the test of science and experience here at one of America's great industrial laboratories. For details and samples, phone or write Owens-Corning Fiberglas Corporation, Dept. 21-H2, Toledo 1, Ohio.

OWENS-CORNING FIBERGLAS

*Fiberglas is the trade-mark (Reg. U.S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation.

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Communications . . .

Professional Management Versus Owner Management

NEW YORK

TO THE EDITOR:

Your correspondent Mr. Paul D. Foote, in your July 29 issue, finds fault with railroad directors and managers who have little or no ownership in the companies they manage. Speaking of directors is one thing, but as for railroad managers, when in the past 20 years has anybody who manages a railroad earned enough money — or been allowed by the tax collector to keep enough of his earnings — to buy anything except, maybe, a home, an automobile, and some life insurance?

A railroad manager is like any other salaried or professional man — his first duty is to provide for at least minimum subsistence for his family if he should die before them. Only after he owns his home free and clear and is able to pay substantial life insurance premiums regularly, is he in a position to buy securities in his own or any other company. The amount of money any railway officer will even then have to invest — failing an inheritance — is not likely to be a sum of much consequence. The railroads are not like a lot of the big industrial companies which earn 30 per cent or so on their investment — and which, consequently, can afford to and do hand out large stock bonuses to their officers.

Probably it would be an advantage to the railroads if their directors and managements had a larger stock ownership than they have. If and when political circumstances are changed to give the industry more money to disburse, doubtless the condition Mr. Foote complains of will improve.

On the other hand, management by owners is no panacea. There are properties managed by owners which are badly managed — just as there are some which the owners manage very wisely. At the same time, who would deny that some of the best managed railroads in the country are managed by professional managers with very little ownership interest?

What the railroads need is good management — whether of owners or not — and, to get good management, they need to be prosperous enough to pay sufficiently high salaries and offer other incentives to attract skilled managerial talent in a highly competitive market. It is doubtful whether the industry offers sufficient incentives of this kind today. It is doubtful whether it *can* offer them until the industry is put on a basis of equality in regulation, taxation and self-support with other segments of the transportation business.

If this aspect of the malady of transportation is corrected, other problems will wear a less formidable mien. In other words, unless the industry's cancer is successfully removed, there is mighty little advantage in trying to salve its milder maladies — of which a low ratio of ownership by management is only one. Mr. Foote has raised a point worthy of incidental consideration, but is it one of vital importance?

ANALYST

DETROIT

TO THE EDITOR:

Mr. Paul D. Foote's letter in your issue of July 29th, regarding the small stockholdings of many directors of corporations, especially, perhaps, railroads —

That same question has occurred to me in checking the directorates of various corporations and noting their stockholdings. No doubt some directors are elected because of their connections with other companies which are customers. This means that the person is a director because of the business he controls and not particularly for his value in management. Others may be directors because of the value of their experience and knowledge of management. In both of these circumstances the individual's ownership of stock is a secondary consideration. On the other hand some men are directors because of their heavy ownership of stock which is not, in all cases, a recommendation for directorship.

In the case of railroad directors it may be expecting too much to get capable men as directors and expect them to invest heavily in railroad stock ownership. Under present government policy towards the railroads a man with the necessary intelligence to be desired as a director would not be one who owns a considerable amount of stock in some of the largest railroad companies. Particularly is this true if the party acquired the stock thinking it to be a good, safe investment.

R. B. RICE

Who Pays Strike Benefits?

AMARILLO, TEX.

TO THE EDITOR:

Your magazine recently stated that the only risk a striking railway employee assumes is the loss of his wages. This seems to be the prevailing opinion everywhere, but I believe you will find the facts are that the employee is only losing part of his wages. He is actually being paid strike benefits by the railroads for striking against them.

The railroad unemployment funds start paying a striker after the seventh day if it is a legal strike. At least that is the ruling made for these payments. In the strike in May against a number of large lines the strikers signed up for the unemployment benefits even though it did not last seven days and no money was paid them. However, the seven days accumulate so that if they strike later, they can start drawing unemployment compensation at the rate of $25 per week from the first day of the strike.

Inasmuch as the railroads pay 100 per cent of the unemployment tax, it means that they pay strike benefits to the strikers, so it is not necessary for the unions to finance the strikers.

In a word, the railroads finance their own execution by paying strike benefits to the executioner. After being slaughtered they then finance their own funeral expenses.

J. E. DODSON



Yardmaster's office at the Denver & Rio Grande Western's North yard, Denver, Colo.

GENERAL NEWS

White House Enters Wage Case Dispute

Unions ask the President to seize the railroads

The White House intervened this week in the mediation proceedings being conducted by the National Mediation Board in an effort to settle the wage, hour and working-rule disputes involving train and yard-service employees.

Presidential Assistant John R. Steelman called all parties, including the Mediation Board, to the White House on August 8, where the proceedings were continuing as this issue went to press. Mr. Steelman was understood to be taking an "active part" in the negotiations, having advanced a "few ideas of his own" during the first "exploratory" sessions.

This action by the White House came after two of the unions involved —the Order of Railway Conductors and the Brotherhood of Railroad Trainmen—wired President Truman on August 4 recommending that the government take over the railroads. The wire, signed by R. O. Hughes, president of O.R.C., and W. P. Kennedy, B.R.T. president, said that government seizure "is the only such action that will cause the carriers to proceed to mediate settlement with us in good faith."

Notice that the wire had been sent to the President was first made public on August 9 when Senator Morse, Republican of Oregon, read it on the floor of the Senate.

In Mediation Three Weeks

During the discussion that followed, Senator Morse declared that failure of the railroads to mediate the dispute was an effort on their part to force the Senate to pass legislation to outlaw railroad strikes.

Senator Donnell, Republican of Missouri, and sponsor of the anti-strike bill to which Senator Morse referred, told the Senate that the present situation makes it "clearly necessary" in the public interest that rail strikes be forbidden. Senator Donnell's bill recently was defeated in committee.

The wage and rules disputes that are involved in this case have been the subject of continuous mediation proceedings since the unions rejected the recommendations of an emergency board. (See *Railway Age* of June 24, pages 84-86.) The proceedings were shifted from Chicago to Washington on July 17, but after three weeks there still was no indication of a settlement.

In addition to the O.R.C. and the B.R.T., the Switchmen's Union of North America and the Railroad Yardmasters of America are also parties in the case.

Under the provisions of the Railway Labor Act the unions have been free to strike since July 15, but have postponed such action to continue negotiations.

In their wire to the President, Messrs. Hughes and Kennedy said the dispute "is reaching a serious crisis." To avert a "substantial interruption" in rail transportation, "we respectfully recommend to you that our government take possession of and operate the railroads . . . until such time as this dispute is settled in fairness to the rights of our members."

Want Carrier Concessions

They went on to say that the unions are being "victimized" by the "stubborn refusal of the carriers to make any reasonable concessions and compromises to the emergency board report." The carriers are using the present international crisis, they added, "as an opportunity for misrepresenting our position in this dispute and for prejudicing the public mind as to our rights under the Railway Labor Act."

Calling the emergency board report "unfair and unsound," the union leaders declared that the railroads have been "stubbornly unwilling to give open minded consideration to any mediation proposal in respect to any of the issues involved."

The wire said that the members of the brotherhoods "want to do whatever is necessary for the war effort," but added that "they think they have the right to turn to you as their Commander-In-Chief in time of national emergency to protect them from this hostile attempt of the carriers to deny to them a fair and just settlement of this dispute."

Mr. Hughes and Mr. Kennedy said the union members "will work for the government gladly under government operation during this period of crisis."

The message concluded with an offer to meet at any time "with you or anyone you designate" for a discussion of the merits of the case. The union leaders declared that the reason the Mediation Board has failed to settle the case is that the railroads "have no desire or good faith will to settle it on a fair basis."

Meanwhile, as these developments occurred in Washington, the Federal District Court at Buffalo, N.Y., held a hearing on August 3 in connection with the temporary injunction which had ended the switchmen's strike on the Chicago, Rock Island & Pacific. The temporary order was issued by the court on July 8, but had been extended through August 4. The court is expected to hand down its decision by August 14 on whether the temporary restraining order should be made a permanent injunction.

Net Income For 1950 Reaches $210 Million

Net railway operating income is $347.8 million

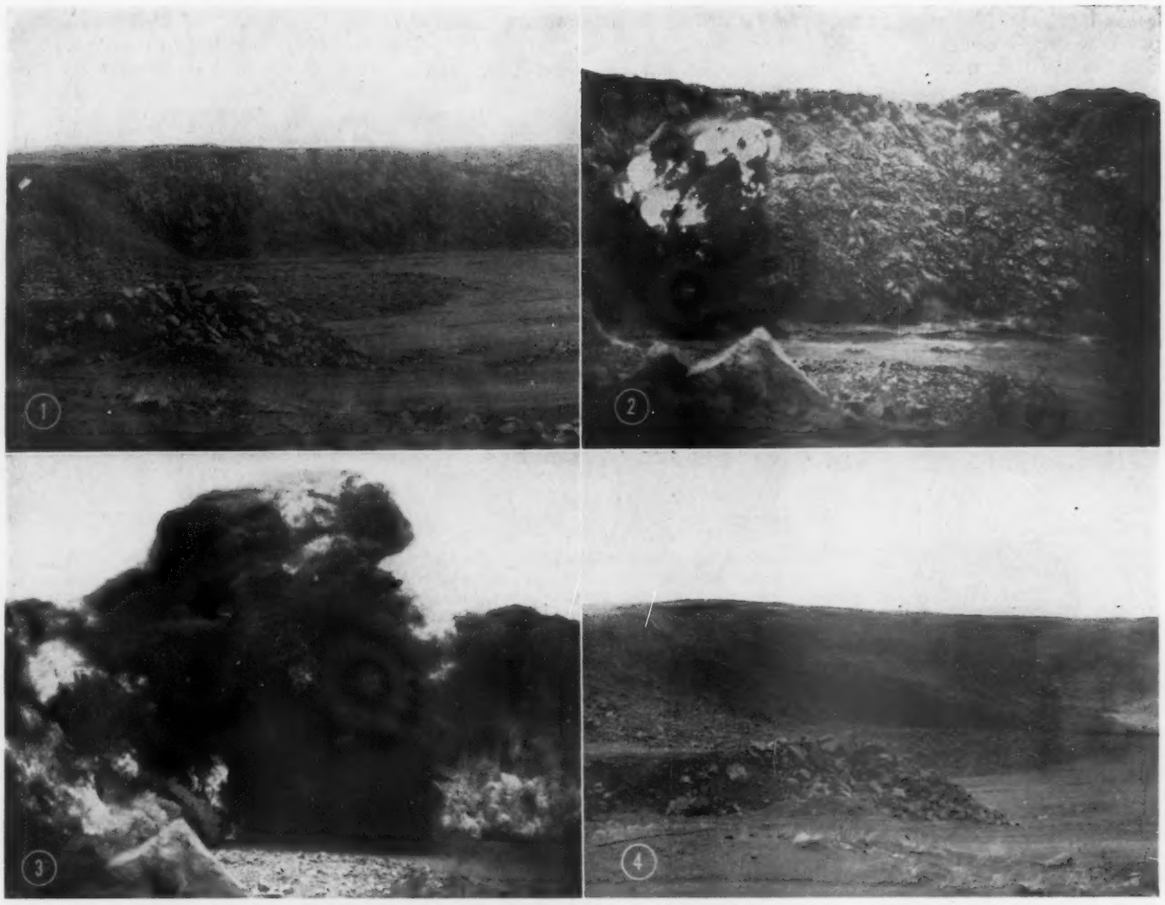
Class I railroads in the first six months of 1950 had an estimated net income, after interest and rentals, of $210,000,000, compared with $174,000,000 in the corresponding period of 1949, according to the Bureau of Railway Economics of the Association of American Railroads. The six-months' net railway operating income, before interest and rentals, was $347,810,612, compared with $315,275,427.

Estimated results for June showed a net income of $72,000,000, compared with $42,000,000 for June, 1949. Net railway operating income for the 1950 month was $90,046,721, while in June, 1949, it was $61,133,357. In the 12 months ended with June, the rate of return averaged 3 per cent, compared with 3.84 per cent for the 12 months ended with June, 1949.

Gross in the six months of 1950 amounted to $4,223,707,275, compared with $4,369,375,737 in the same period of 1949, a decrease of 3.3 per cent. Operating expenses amounted to $3,-

CLASS I RAILROADS—UNITED STATES

	1950	1949
MONTH OF JUNE		
Total operating revenues	$ 779,182,389	$ 735,451,268
Total operating expenses	588,763,307	588,186,157
Operating ratio per cent	75.56	79.98
Taxes	84,272,231	72,538,619
Net Railway Operating income (Earnings before charges)	90,046,721	61,133,357
Net income, after charges (est'l)	72,000,000	42,000,000
SIX MONTHS ENDED JUNE 30, 1950		
Total operating revenues	4,223,707,275	4,369,375,737
Total operating expenses	3,354,141,920	3,555,343 952
Operating ratio —per cent	79.41	81.37
Taxes	433,384,975	418,615,305
Net railway Operating income (Earnings before charges)	347,810,612	315,275,427
Net income, after charges (est.)	210,000,000	174,000,000



IN A SINGLE BLAST, reputedly the largest since Bikini, 130 tons of TNT tore off the top of a mountain and loosened a year's supply of granite ballast for the Union Pacific. Set off on March 21 at Granite Canon, Wyo., by Morrison-Knudson Company, which supplies the U.P. with ballast, the explosion was photographed by a special rapid-sequence camera located about a half-mile from the scene. The photos in sequence show: (1) the half-mile long, 120-ft. granite cliff before the blast; (2) a close-up of the cliff an instant after the blast began; (3) smoke and flame obscuring the cliff as rocks—some more than two feet across—shower the area; (4) an estimated 1,250,000 cu. yd. of loose granite lying in a sloping mound after the air cleared

354,141,920, compared with $3,555,-343,952, a decrease of 5.7 per cent.

Twenty-one Class I roads failed to earn interest and rentals in the six months, of which eleven were in the Eastern district, one in the Southern region, and nine in the Western district.

Eastern Roads Do Well in June

Class I railroads in the Eastern district in June had an estimated net income of $29,000,000 compared with $9,000,000 in June, 1949. In the six months, their estimated net income was $80,000,000 compared with $77,000,000 in the same period of 1949.

Their net railway operating income in June amounted to $40,305,420 compared with $21,628,334 in June, 1949. Those same roads in the six months had a net railway operating income of $153,095,965 compared with $159,202,-743 in the same period of 1949.

Gross in the Eastern district in the six months totaled $1,905,618,978, a decrease of 5.4 per cent compared with the same period of 1949. Operating expenses totaled $1,534,768,073, a decrease of 6.1 per cent.

South, West Also Improve

Class I railroads in the Southern region in June had an estimated net income of $8,000,000 compared with $3,-000,000 in June, 1949. In the six months, their estimated net income was $44,000,000 compared with $32,000,-000 in the same period of 1949.

Those same roads in June had a net railway operating income amounting to $10,715,058 compared with $6,128,-921 in June, 1949. Their net railway operating income in the six months amounted to $66,136,889 compared with $54,008,383 in the same period of 1949.

Gross in the Southern region in the six months totaled $614,341,453, an increase of 0.2 per cent compared with the same period of 1949, while operating expenses totaled $472,291,245, a decrease of 3.8 per cent.

Class I railroads in the Western district in June had an estimated net income of $35,000,000 compared with $30,000,000 in June, 1949. Their estimated net income in the six months was $86,000,000 compared with $65,-000,000 in the same period of 1949.

Their net railway operating income in June amounted to $39,026,243 compared with $33,376,102 in June, 1949. Those same roads in the six months of 1950 had a net railway operating income of $128,577,758 compared with $102,064,301 in the same period of 1949.

Gross in the Western district in the six months totaled $1,703,746,844, a decrease of 2.2 per cent compared with the same period of 1949, while operating expenses totaled $1,347,082,602, a decrease of 5.8 per cent.

House Passes Forwarder Bill

The House on August 9 passed H.R. 5967, the bill which would amend the Interstate Commerce Act to accord common carrier status to freight forwarders and authorize forwarders to enter into or continue to operate under

contracts with common-carrier truckers.

The motor carrier contracts, as provided for in the bill, would have the net effect of covering terminal-to-terminal trucking up to 450 miles. Where the linehaul transportation, from concentration point to break-bulk point, did not exceed this distance, freight forwarders would be permitted to enter agreements with the truckers providing for forwarder payments lower than the truckers would receive under their tariffs.

As the forwarder bill passed the house, a similar bill, S. 2113, was already before the Senate. It was favorably reported by the Interstate and Foreign Commerce Committee last March. (See *Railway Age* of March 4, page 65.)

Both H.R. 5967 and S. 2113 were introduced in Congress as an aftermath of a decision by the Interstate Commerce Commission which fixed terms and conditions under which forwarders could utilize the services of the motor carriers. That I.C.C. report provided, among other things, that truckers might charge less than their published tariff rates for performing so-called assembly and distribution services for forwarders; but that contracts or agreements covering terminal-to-terminal trucking would have to provide for forwarder payments no lower than the truckers would receive under their tariffs.

Security Analysts See Better Traffic, Earnings

Substantial increases in railroad traffic, with corresponding improvement in earnings before taxes as a result of the nation's rearmament program, were forecast by three railroad specialists in a discussion of "Railroads in a Defense Economy" at an August 4 meeting of the New York Society of Security Analysts. The speakers were Pierre R. Bretey and E. Frederic Uhrbrock, railroad analysts for, respectively, Baker, Weeks & Harden and Vilas & Hickey, and Walter H. Fincke, assistant vice-president of the Savings Bank Trust Company.

"Our rearmament period [Mr. Bretey said in part] is likely to be of relatively long duration — several years at the very minimum. . . . A large armament program suggests a sizeable cut-back in civilian goods, and the substitution therefor of heavy machinery and war materiel. . . . Railroads are probably going to haul 80 per cent of these armament manufactures, whereas much of the production displaced formerly was hauled by trucks. To that extent the rails will be helped."

A similar view was expressed by Mr. Uhrbrock in his statement that:

"I think from here on we can definitely be pretty well assured of a heavy volume of traffic for a more or less indefinite period of time. It will take not only manufactured and miscellaneous goods, but also the heavier goods including coal. . . . As a result, we look for a sustained, increasing volume of business over the last part of the year.

"From the standpoint of expenses, we are going to see some increase, perhaps some wage increase. We will undoubtedly see more maintenance as the roads attempt to cut down the supply of bad order cars. I think that can be done and taken in stride so that even though the roads may substantially increase their maintenance work, they still will show large increases in net income."

Mr. Fincke took the position that:

"Increased defense expenditures should result in higher carloadings and higher earnings than previously expected. Heavy-industry traffic should show a marked increase. Raw materials will undoubtedly be stockpiled. There may be some diversion of coastwise shipping to the railroads. . . . The most encouraging factor is that there should be less labor trouble during the emergency.'"

Mr. Fincke also pointed out that the railroads are in better physical condition and in better financial position to handle defense traffic than before World War II; and called attention to the possibility of increased passenger traffic and to the fact that "land grant rates" are no longer available to the government. He suggested, however, that the railroads "undoubtedly will make some concessions in rates." Both he and Mr. Uhrbrock mentioned the chances of "some reconversions of fuel back to coal," so that "coal loadings of the next six months are going to be not only substantially ahead of 1949, but could easily run fairly close to the 1948 level."

All three speakers discussed the outlook for railroad securities of various types, but as Mr. Bretey put it, "future market trends . . . in all likelihood will be determined by whatever taxation will emerge from Washington over coming weeks or months."

A.C.F. Gets Tank Order

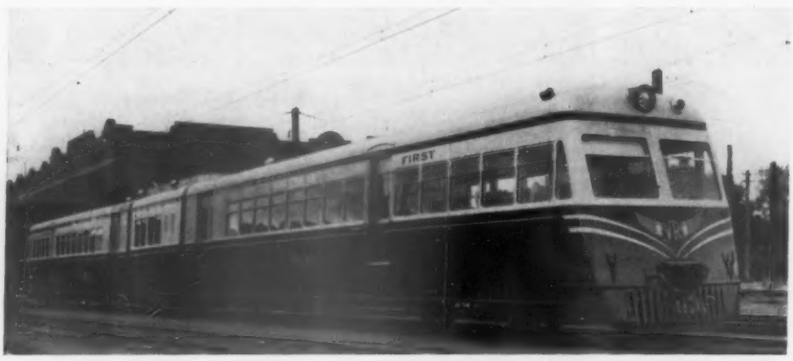
The American Car & Foundry Co. has an order from the Department of the Army for the building of combat tanks, according to an August 10 announcement by Charles J. Hardy, Jr., president. During World War II A.C.F. produced for the government over 15,000 combat tanks.

Rock Island Strike Stay Extended to August 14

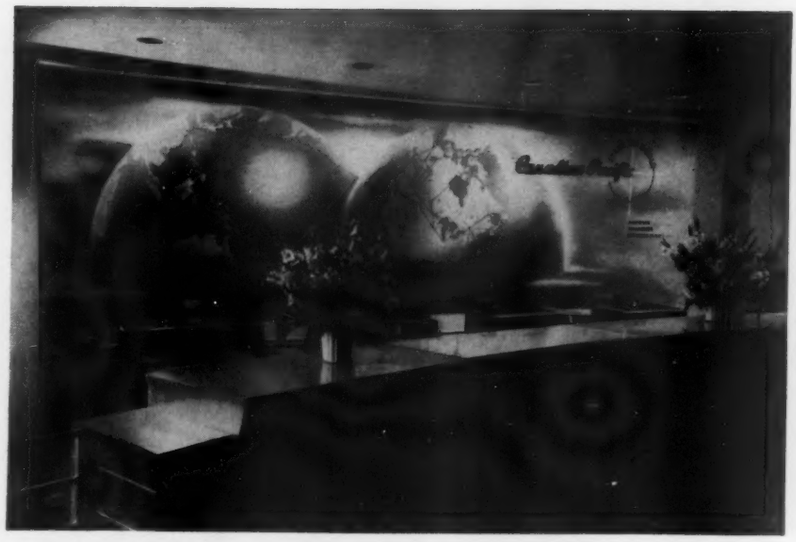
Federal Judge John Knight, in the United States District Court at Buffalo, N. Y., on August 3 extended for 10 days his July 8 order restraining the Switchmen's Union of North America from striking against the Chicago, Rock Island & Pacific. The government had sought a permanent injunction to replace the court's restraining order, which would have expired on August 3. The Rock Island was seized by order of President Truman on July 8 (see *Railway Age* of July 15, page 50), and its operations assigned to the Secretary of the Army. Col. Thomas E. Sams has been assigned to the property to represent the Army's Chief of Transportation.

The 10-day extension was granted to enable Judge Knight to study testimony presented at a hearing on August 3. Dr. Paul M. Zeis, chief of the transportation and communications division of the Office of Industry & Commerce, Department of Commerce, had testified that a prolonged work stoppage of the C.R.I.&P. would have "a very serious effect" on movement of critical war materials and military personnel. Col. Ernest B. Gray, chief of the communications and traffic service division of the Army Transportation Corp, said that a long strike against this portion of an important transcontinental route "in close proximity to a number of important military installations" would impair the national security. He cited the Rock Island's 1945 record of transporting 688,000 troops and 98,000 cars of military freight. George E. Miller, deputy assistant postmaster general, testified that the Rock Island handles mail for 13 states, and is the only railroad serving a large number of post offices.

Arthur F. Glover, president of the Switchmen's Union—whose headquarters are at Buffalo—testified that his union had offered to move essential materials during the strike, which be-



TWELVE OF THESE new 280-hp., 94-passenger Diesel rail cars went into service on Australia's Victorian Railways on June 6. The cars are a part of the Victorian system's £80-million rehabilitation project, "Operation Phoenix," details of which were described in the *Railway Age* of June 17, page 84



CANADIAN PACIFIC'S new brightly lighted, air-conditioned New York ticket office as the customer sees it

gan on June 25 and ended with the court's order on July 8, but that there were only a few applications for special movements. Dr. Arthur E. Burns, professor of economics, George Washington University, Washington, D. C., presented evidence intended to prove that the Rock Island's part in the national transportation picture is insignificant.

He offered Interstate Commerce Commission reports to show that the Rock Island carries but 1½ per cent of the nation's rail transportation, originating only 94.6 per cent, and terminating 94 per cent, of the total freight in the area which it serves.

The union's strike action followed its non-acceptance of an emergency board's recommendation with respect to the establishment of a 40-hr. week with 48 hours' pay.

Roads Plan New Service For Seattle-Portland Run

Because of "public demand for increased service," the Northern Pacific, the Great Northern, and the Union Pacific on August 13 will increase their joint passenger-train service between Seattle, Wash., Tacoma, and Portland, Ore.

The roads will provide an additional early-morning train in each direction between Seattle and Portland through Tacoma. The trains will operate on a four-hr. schedule to meet "insistent demand" by newspapers and civic groups for such service. The present early-morning trains handle local business and require slightly more than five hrs. for the Seattle-Portland run. These local trains will be continued.

M. L. Countryman, general counsel of the N.P., in a letter to the Interstate Commerce Commission on July 31, asked the commission to permit the added service. The commission issued its order of approval on August 8. "Passenger travel, in part due to the Korean situation, has substantially increased and at times some of the present trains carry the maximum number of added cars," Mr. Countryman told the I.C.C. He added that night trains on the run are also "very heavy."

The August 13 date for the change was chosen in view of the Southern Pacific's recent decision to shorten the schedule of its "Cascade Limited" into Portland on that date. The roads will thus maintain connections at that point.

P.R.R. Trying Out New U.S. & S. Space-Sale System

A newly developed electrical device for quick and accurate reporting of train space information is being tested in the ticket offices of the Pennsylvania in Cleveland, Ohio.

Known as the "Infomat" system, the device enables the office selling train space to determine within eight seconds space available for reservation and sale on departing trains. It was developed for the P.R.R. by the Union Switch & Signal Co.

A recording machine is located in the reservation bureau at the Euclid Avenue station. Small consoles known as Infomat cabinets have been installed at the various ticket sales offices in the Cleveland area. By means of electrical coded pulses, each kind of Pullman space available for sale over a 90-day period can be determined by selecting the month, date, destination and train on the Infomat. This request is then automatically transmitted to the recording machine, and within eight seconds the answer comes back, showing by means of lights all types of space available on the particular train to the destination on the date selected. The patron, as well as the ticket seller, may observe the inventory of all accommodations available on the train in which he is interested, and see if the space requested is included. If the space requested is not listed, another selection may be necessary.

When a request is transmitted to the main recording machine, a direct telephone circuit is established from the ticket seller's window to the main posting board, so that the space selected by the patron may be sold quickly after the report is received.

The number of ticket offices that can be connected into the system is limited only by practical consideration. While the Cleveland installation has been set up to operate locally, it is impossible to connect with reservation bureaus in other cities under the same arrangements, thus obtaining a report of space available within the same eight-second period.

The Infomat system is being tested "in a constant endeavor to improve service to the public," the railroad declares, noting that "the ticket buyer is the chief benefactor of the new device, which permits completion of a transaction in a fractional part of time formerly required."

Emergency Board on N.Y.C.

President Truman on August 4 created an emergency board to investigate a dispute on the New York Central's lines east of Buffalo, N. Y., where four railroad operating brotherhoods have threatened to strike. Some 290 grievance cases are involved in the dispute. (See *Railway Age* of May 27, page 52.)

The Unions are the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen & Enginemen, the Order of Railway Conductors, and the Brotherhood of Railroad Trainmen. The National Mediation Board attempted to settle the dispute by mediation, but no agreement could be reached and the proceedings were concluded on August 4.

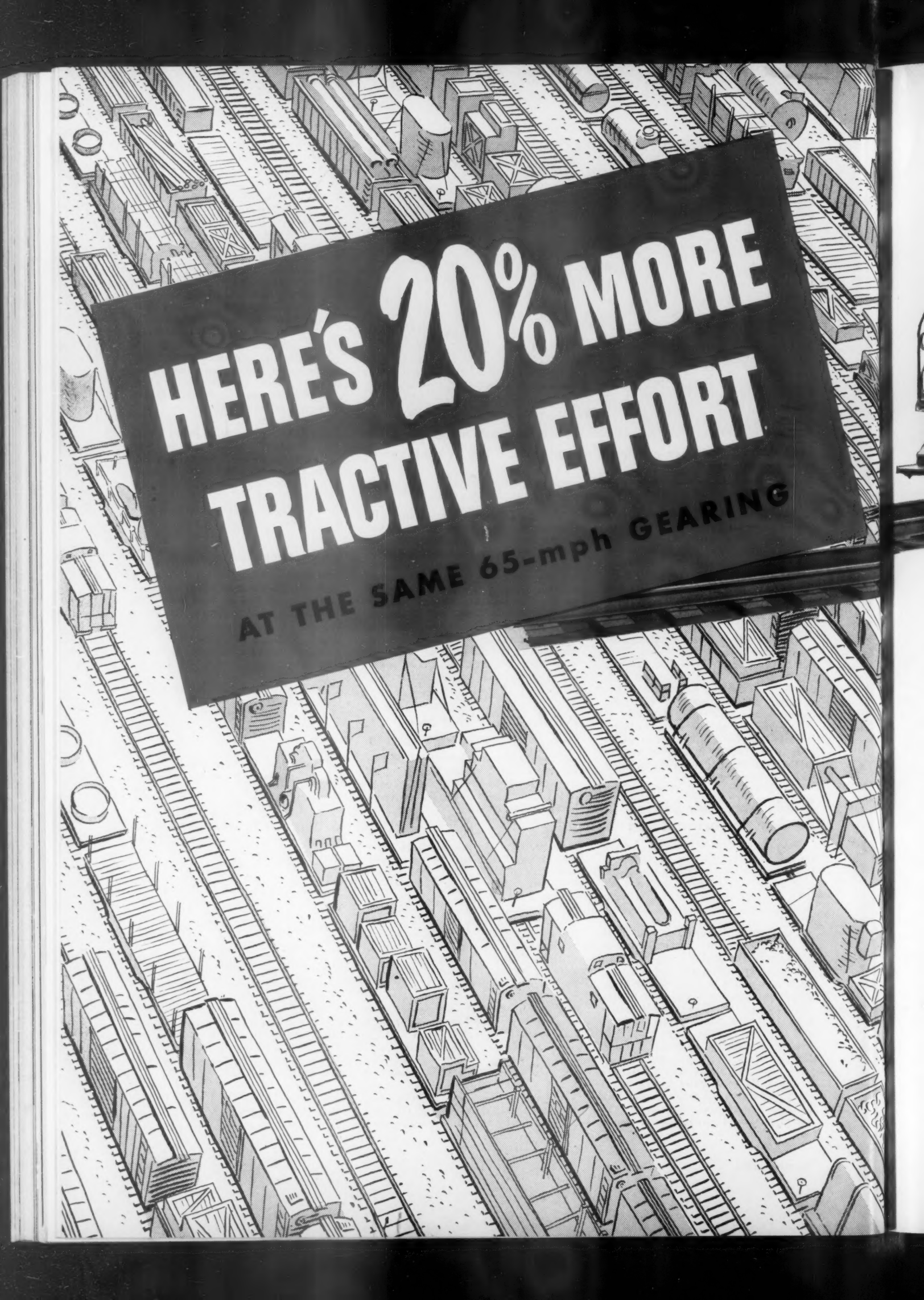
Members of the emergency board are Frank M. Swacker, New York attorney; Chief Justice Paul G. Jasper of the Indiana Supreme Court; and Wayne Quinlan, attorney of Oklahoma City, Okla. They will begin hearings at New York City on August 14.

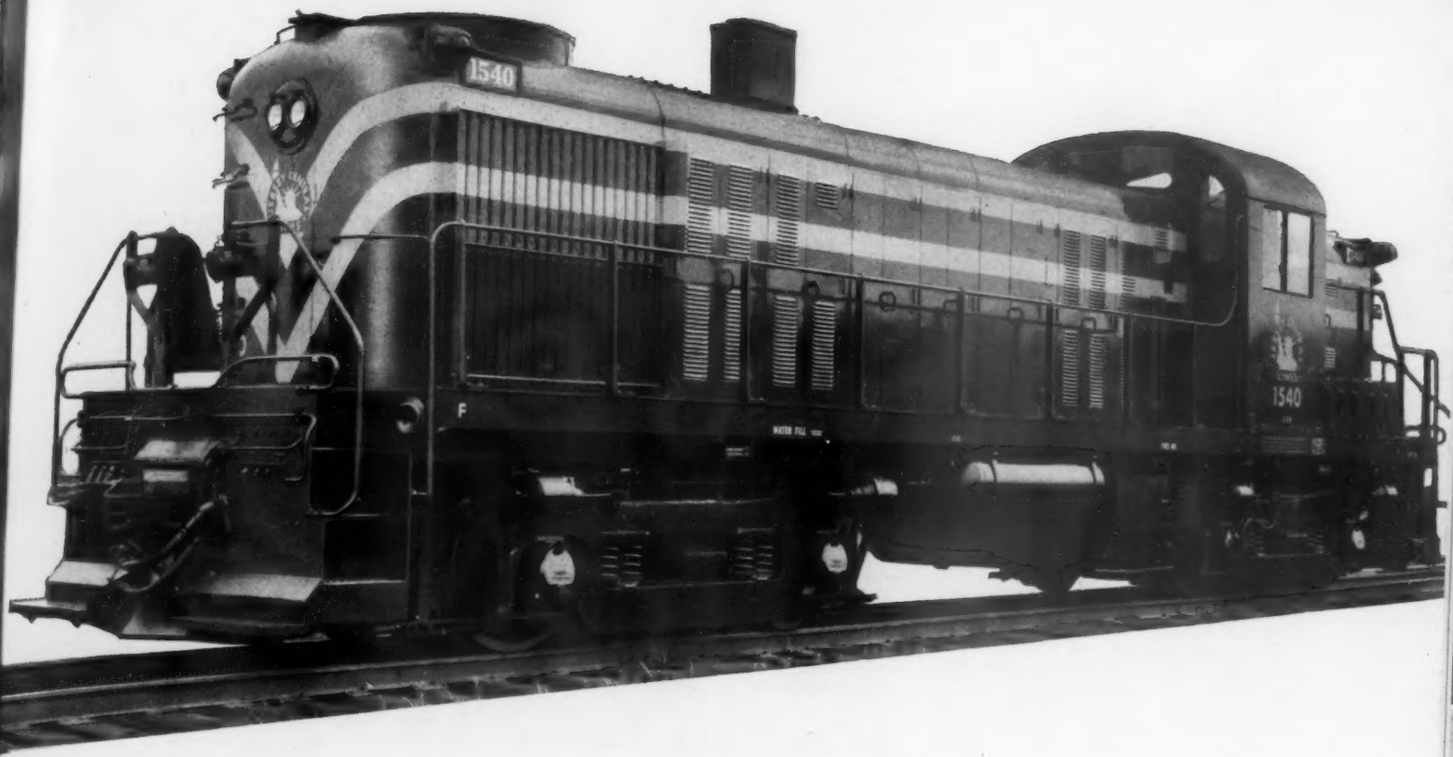
Freight Car Loadings

Loadings of revenue freight in the week ended August 5 totaled 837,218 cars, the Association of American Railroads announced on August 10. This was a decrease of 7,631 cars, or 0.9 per cent, below the previous week; an increase of 120,355 cars, or 16.8 per cent, above the corresponding week last year; and a decrease of 41,429 cars, or 4.7 per cent, below the equivalent 1948 week.

Loadings of revenue freight for the week ended July 29 totaled 844,849 cars, and the summary for that week

(Continued on page 68)


HERE'S 20% MORE
TRACTIVE EFFORT
AT THE SAME 65-mph GEARING



THE ALCO-GE "1600" ROAD SWITCHER

HERE IT IS. Alco-GE's new all purpose "1600" road switcher—with a better than 20% increase in tractive effort. It's ready to dig in and do an even better job than it's already doing all over the country's railroad network.

This is the road switcher that has been turning in amazing performance records on one railroad after another for nearly four years. Now, constant research pays off to you—in the form of a twenty per cent increase in continuous tractive effort. The old rating was 42,500 lbs. with 65-mph gearing; the new one is *52,500 with the same 65-mph gearing!*

These new ratings apply to all Alco-GE 1600-hp and 2250-hp road locomotives now being produced.

What does it mean? It means more boxcars behind your locomotive, more payload, fewer trains, more earning power for your motive power, and an economy of operation from your new "1600" you never thought possible.

20% MORE TRACTIVE EFFORT WITH THE SAME GEARING

THINK IT OVER—then call in your Alco-GE representative

AMERICAN LOCOMOTIVE
and
GENERAL ELECTRIC

113-249



KOREAN RAILWAY ROLLING STOCK sags a bit under the heavy load of U. S. road equipment readied to leave the port of Pusan for the fighting front. The short flat cars in this picture are equipped with arch bar trucks and a variety of spoked and solid wheels

(Continued from page 65)
as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS

For the week ended Saturday, July 29

District	1950	1949	1948
Eastern	149,547	125,682	159,487
Allegheny	177,568	138,546	182,947
Pocahontas	62,271	48,187	73,073
Southern	123,590	107,211	133,236
Northwestern	141,347	131,017	138,822
Central Western	127,520	116,302	137,656
Southwestern	63,006	57,099	69,154
Total Western Districts	331,873	304,418	345,632
Total All Roads	844,849	724,044	894,375
Commodities:			
Grain and grain products	62,532	65,623	66,369
Livestock	6,907	8,538	8,874
Coal	154,673	109,661	188,701
Coke	15,126	9,166	15,499
Forest products	48,542	40,597	53,948
Ore	85,326	74,357	76,829
Merchandise l.c.l.	84,275	87,142	102,046
Miscellaneous	387,468	328,726	382,109
July 29	844,849	724,044	894,375
July 22	829,884	718,516	882,129
July 15	789,268	724,183	892,080
July 8	553,876	595,321	755,100
July 1	783,357	644,182	757,278
Cumulative total 30 weeks	20,905,140	21,499,146	24,251,194

Kiefer Honored by Franklin Institute

Paul Walter Kiefer, of New York, chief engineer, equipment, of the New York Central System, has been awarded the George R. Henderson Medal by the Franklin Institute of Philadelphia, Pa. The award, which was established in 1924, will be presented to Mr. Kiefer on October 18, "for noteworthy accomplishments in the railroad equipment field."

U.P. Runaway Locomotive Kills Three Employees

At least three employees were killed on the Union Pacific at Cheyenne, Wyo., on August 3, when a runaway steam locomotive crashed into their Diesel switcher at the west end of yard limits, after a run down eight miles of steep grade. Both engineman and fireman were out of the cab when the steam locomotive started its uncontrolled flight at Borie, nine miles west of Cheyenne station. The speed of the runaway at the time of the impact was estimated to be between 40 and 50 m.p.h., according to news reports.

Recommends I.C.C. Approve Lake-Coal Demurrage Pact

Approval of a Reed-Bulwinkle Act agreement to cover movement of coal and certain other commodities through lower lake ports has been recommended by Charles R. Seal, director of the Interstate Commerce Commission's Bureau of Water Carriers and Freight Forwarders.

Fourteen railroads are parties to the proposed agreement, which was filed with the I.C.C. last November. (See *Railway Age* of December 3, 1949, page 59.) The agreement would cover procedures for joint consideration, initiation, and establishment of demurrage charges, rules, and regulations on cars held for unloading into vessels at U. S. ports on Lake Ontario, Lake Erie, and lower Lake Michigan.

In recommending approval of the agreement, Mr. Seal said it would continue in effect a long-standing committee composed of representatives of carriers serving the lake ports.

Time Extended For Filing Views On Livestock Rates

Interested parties will have until September 15 to submit their views on the petition filed recently with the Interstate Commerce Commission by livestock interests, in which it was asked that the commission order the railroads to show cause why rates on livestock should not be reduced. (See *Railway Age* of June 24, page 125.)

The commission originally set August 15 as the deadline for filing statements. Copies of any views submitted to the commission must be furnished to counsel for the petitioners by the September 15 deadline. The petitioning associations include American National Live Stock Association and six other groups.

The Eastern Meat Packers Association filed a statement on August 8, in which it supported the petition of the livestock interests.

The association declared that because of the long haul from mid-west and western markets, eastern meat packing plants are dependent upon rail transportation to obtain livestock — "the essential raw material of their operations" — and consequently the level of rates may clearly be called "the life line" of the industry. Increasingly higher rates have threatened to eliminate the narrow margin on which the meat packing industry operates, the statement said.

New Car-Service Rules Filed By Short Lines

President J. M. Hood of the American Short Line Association has filed with the Interstate Commerce Commission a set of revised car-service rules, as adopted by 49 short line roads, under which the roads can use their freight cars for loading interline traffic and thus send them out to earn per diem rentals.

The new rules, with an August 1 effective date, are a revision of those which some 50 short lines have had in effect since November 8, 1948. As explained by Mr. Hood, the principal change is the elimination of the requirement (Rule 1) that owned cars not be used for the movement of traffic beyond the limitation of the home road when the use of other suitable cars under these rules is practicable." (See *Railway Age* of May 13, page 62.)

Permitting the short lines to load system cars will place originating lines in a position to acquire and operate cars profitably, thus reducing their present car hire burden, Mr. Hood said; roads originating substantial traffic will get relatively quick relief from present high per diem rates, he added.

Seek to Avert Canadian Strike Threat

Talks between major Canadian railroads and unions representing about 125,000 of their employees are being continued in an effort to avert a strike which, as reported on page 66 of last week's *Railway Age*, has been called for 6 a.m. August 22.

The unions include one group of 15 international non-operating brotherhoods, with a total Canadian membership of some 90,000; and two Canadian unions — the Canadian Brotherhood of Railway Employees and Other Transport Workers and the Brotherhood of Express Employees — with a combined membership of about 35,000. The international group is seeking a 40-hr. week with a 7-cent hourly wage increase; the Canadian unions are asking a 40-hr. week with a 10-cent hourly increase.

Government conciliation boards have recommended a 44-hr. week with a 6.8-cent hourly pay increase, which the railroads have accepted and the unions rejected.

Safety Glass Proves Value In Long Island Derailment

Three persons were hospitalized, mainly for shock, and approximately 45 others given first aid, following derailment of a Long Island passenger train just west of the railroad's Huntington, N. Y., passenger station at 4:13 p.m. on August 5. Two of those hospitalized were passengers on the derailed train, and the third was its engineman, whose quick application of its air brakes was credited with averting a more serious accident.

The train involved was No. 642, eastbound from New York to Port Jefferson, with a steam locomotive and six cars. In single-track manual-block territory west of Huntington it was scheduled to pass a freight train which was properly in the clear on a siding. Due, however, to error or misunderstanding, a freight brakeman is reported to have opened the switch leading to the siding before the passenger train reached it, and before the freight conductor had obtained the required clearance from the block operator. It was this switch which derailed the locomotive and first two cars of the passenger train.

The fact that both the derailed cars were equipped with safety glass, and that not a single pane was broken in either car, was credited by a railroad spokesman with minimizing both number and severity of injuries.

Mexico Opens New Rail Link With Yucatan

An entirely new 450-mi. railroad line has linked the peninsula of Yucatan — which forms the "south shore" of the Gulf of Mexico — with the rest of the Mexican railway network. A project which has taken nearly 16 years to complete, the new line was built through jungles and swamps to the city of Campeche at a cost said to approach $100,000,000. Although Yucatan has long had a 400-mi. internal rail system, it has been entirely dependent on sea and air transport for contact and commerce with the rest of Mexico.

Despite its comparative isolation, Yucatan has been active and productive. With the construction of the new railroad, Mexico hopes to expand the area's production of rubber, sugar and pineapples, and to develop tourist business. The line will use Diesel-electric locomotives.

N. Y. C. Employs Student Engineers

The New York Central has in operation a "Summer Student Engineering Program" whereby, this summer, various departments of the railroad were authorized to employ up to 35 civil engineering students. Under this program, 32 of the authorized positions have been filled — 27 with summer students and 5 with former summer students who have qualified for permanent employment. Of these five, four had worked for the Central during at least two previous summers. Of the 27 summer students now employed, eight are on the job for the second or third summer.

Schools represented by the 32 students are: (one student each) Georgia Tech., M.I.T., Pennsylvania State, Clarkson Tech., Union College, Jackson Junior College (Michigan), Baldwin-Wallace, University of Cincinnati, Fenn College (Cleveland), and Carnegie Tech.; (two students each) Columbia University, Syracuse University, Lehigh University, Ohio State, University of Michigan, Illinois Tech., and University of Illinois; (three students) Manhattan College; (five students) Purdue University.

News Briefs . . .

. . . Four new sleeping cars have been placed in service by the Gulf, Mobile & Ohio between Chicago and St. Louis, Mo., and between Chicago and Mobile, Ala., providing daily service on each run. Built by the American Car & Foundry Co., the new cars offer passengers a choice of compartments, bedrooms, roomettes or open sections.

. . . Reduction of one-day excursion fares between New York and Washington, D. C., to a new post-World War II low of $5.75 including tax has been announced by the Pennsylvania, effective August 13. The low round-trip rate —less than one-third the regular fare— applies only on specified trains. Popularity of its one-day Sunday excursion fares between the New York metropolitan area and north Jersey coast resorts between Long Branch and Bay Head Junction has led the road to extend those fares through August 27.

. . . A total of 25 modernized coaches will shortly be placed in service on various Grand Trunk Western and Canadian National main line trains. The interiors of the cars have been divided into two almost equal compartments for smokers and non-smokers, and in addition, the cars feature enlarged lounge facilities, "Sleepy Hollow" seats, individual reading lights for each passenger and a new type water cooler equipped with a purifier.

. . . A new daily Chicago-Seattle sleeping car featuring roomette and bedroom accommodations has been added to the Chicago & North Western-Union Pacific streamliner "City of Portland."

. . . A new low round-trip fare of $12 plus federal tax has been put into effect by the Union Pacific between Los Angeles, Cal., and Las Vegas, Nev. The "economy rate"—which applies on any U.P. passenger train except the "City of Los Angeles," on which an extra fare is added—is expected to promote vacation travel from southern California to the Nevada resort city.

. . . Seven supervisory training classes, involving 133 men, are being conducted, or have been recently completed, on the Pennsylvania's Pittsburgh division under direction of the management training division of Pennsylvania State College. "Particular stress is being laid," according to J. A. Appleton, P. R. R. vice-president, "upon the necessity for better management relations between supervisors and top management, and between supervisors and workers."

. . . August will mark the 100th anniversary of an early Indiana railroad line—the 18-mi. Rushville & Shelbyville—which now forms a portion of the Shelbyville branch of the Pennsylvania's Southwestern division.

. . . "Several thousand persons" took advantage of special one-day round-trip excursion fares offered by the Pennsylvania-Reading Seashore Lines between Philadelphia, Pa., and southern New Jersey coast resorts on July 29 and 30. The new fares will be available daily until September 10, in what the P.-R. S. L. describes as its "most extensive excursion program in recent years," undertaken "in an effort to make rail travel especially attractive."

Retirement Board Marks New Benefit Year

In a statement to the press, issued shortly after the beginning of its new "benefit year" on July 1, the Railroad Retirement Board outlined the procedure for securing unemployment and sickness benefits. The board pointed out that payments under private accident or health insurance policies, or from railroad relief departments, do not affect payments of sickness benefits. All payments, the board said, are based on established "benefit rates" derived from an individual's earnings for the 1949 calendar year. To qualify, an employee must have earned at least $150 in railroad employment during the preceding calendar year; he will not be paid benefits for any day on which he received wages, salary, pay for time lost, vacation pay or any other remuneration. Both unemployment and sickness benefit payments are payable, the board said, for a maximum of 130 days of the benefit year.

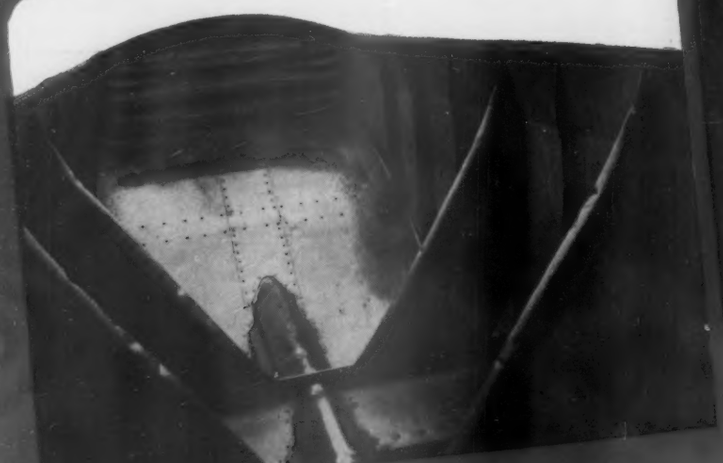
News Department continued on second left-hand page

After 14 years experience



New in 1935
—weight only 34,800 lb.

One of ten Chesapeake & Ohio 50-ton hopper cars with $\frac{1}{8}$" sides and ends and $\frac{3}{16}$" bottoms —some of the earliest equipment built with U·S·S COR-TEN.





At time of inspection in 1949

Photographs show A and B ends of car. Note the relatively good condition of the extremely light COR-TEN sheets after 14 years' service.

with U·S·S COR-TEN

The Chesapeake and Ohio Railway says:

"We are now rebuilding 8,000 of our hopper cars using High Strength Steels in conventional thicknesses. We are aiming for several years of additional service life to avoid costly intermediate repairs and maintenance. Based upon our fourteen-year test of High Strength Steels, we expect to accomplish both."

★ ★ ★

HERE'S a case history of interest to every railroad officer concerned with the improvement of freight car efficiency.

The Chesapeake and Ohio was one of the first railroads to apply U·S·S COR-TEN in freight car construction. In 1935 they bought a test lot of COR-TEN hopper cars of 50-ton capacity using 1/8" sides and ends and 3/16" bottoms, weighing only 34,800 pounds.

Six of these COR-TEN hoppers were recently inspected. After 14 years' regular service the original sheets were still in the cars, although some had been patched. C & O representatives stated that the condition of the sides and bottoms showed that in the worst of the cars, both had lasted 12½ years before requiring replacement. They also reported that copper steel used in *heavier* thicknesses, 3/16" sides and 1/4" bottoms, lasts from 11 to 14 years in similar service.

Recently, with a big rebuilding program in mind, the Chesapeake and Ohio was faced with an important decision. Not satisfied with the service life of its copper steel hopper cars, its first thought was to increase the thicknesses of side sheets to 1/4" and bottom sheets to 3/8". But this would increase car weight approximately 4,000 lb. and would decrease carrying capacity. On 8,000 cars this would have meant a big sacrifice in revenue.

The good performance of COR-TEN in the extremely lightweight hoppers suggested a promising alternative. Instead of using heavier copper steel sheets, High Strength Steel in the original copper steel thicknesses (3/16" sides, 1/4" bottoms), would cost only $25.00 more per car and should give longer life with no increase in weight and no decrease in payload capacity. The decision was made in favor of using High Strength Steel.

AMERICAN STEEL & WIRE COMPANY, CLEVELAND · CARNEGIE-ILLINOIS STEEL CORPORATION, PITTSBURGH
COLUMBIA STEEL COMPANY, SAN FRANCISCO · NATIONAL TUBE COMPANY, PITTSBURGH · TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM
UNITED STATES STEEL SUPPLY COMPANY, WAREHOUSE DISTRIBUTORS, COAST-TO-COAST · UNITED STATES STEEL EXPORT COMPANY, NEW YORK

USS TRADE MARK

U·S·S HIGH STRENGTH STEELS

UNITED STATES STEEL

CAR SERVICE

I.C.C. Service Order No. 858, effective from August 3 through February 2, 1951, uness otherwise modified, restricts to 72 hr. the time which carloads of lumber, veneer or forest products may be held for diversion, reconsignment or disposition. Cars held for a longer period will be subject to full local or joint (not proportional, reshipping or transshipping) tariff rates.

The commission said the order also applies to cars stopped for partial unloading at a hold or reconsigning point when the order for the "stop for partial unloading" is received by the carriers subsequent to arrival of such cars at the hold or reconsigning point. Roads are forbidden to execute reconsigning orders when such would require any backhaul, or result in a car moving through or to a point where that car had previously been transported in through or continuous movement.

I.C.C. Service Order No. 859, effective August 3 through February 2, 1951, unless otherwise modified, prohibits roads from accepting cars loaded with lumber, shingles, plywood, doors and other lumber or forest products in Oregon or Washington, for forwarding to another point to complete the loading, unless the shipper or consignor certifies on the bill of lading that freight loaded in the car at the first loading point equals or exceeds 25 per cent of tariff minimum weight.

I.C.C. Service Order No. 860, effective August 4 through October 31, unless otherwise modified, authorizes use of not more than three refrigerator cars, in lieu of each box car ordered, for transporting carloads of fruit and vegetable containers, box shooks or other packaging or packing materials, from origins in Washington, Oregon or California to destinations in California.

This order specifies that two refrigerator cars may be furnished in lieu of one box car ordered of a length of 40 ft. 7 in., or less, and three refrigerator cars may be furnished in lieu of one box car ordered of a length of over 40 ft. 7 in. but not over 50 ft. 7 in. In either case, the cars are subject to the carload minimum weight which would have applied if the shipment had been loaded in a box car of the size ordered.

A revised Service Order No. 856 has been issued by the I.C.C. to clarify its original order relating to inclusion of Saturdays and Sundays in computing demurrage time. The only change was the addition of the following sentence: "When the last day of free time begins to run 7 a.m., Friday, the Saturday and Sunday immediately following shall be included, or when the last day of free time begins to run 7 a.m. Saturday, the Sunday immediately following shall be included in computing demurrage detention time."



IT COST THE NORFOLK & WESTERN $210,000 to provide Williamson, W. Va., with this attractive, thoroughly modernized passenger station. The glass-bricked portion (exterior view, above) is the baggage room, with the waiting room beyond. Behind the camera to the right is a new express building, which also houses offices and an employees' locker room. A new freight station is under construction across the tracks, behind the camera position



EQUIPMENT AND SUPPLIES

FREIGHT CARS

July Freight-Car Orders 30,065; Deliveries 3,464

Freight-train cars ordered in July for domestic use totaled 30,065, "the largest monthly figure since 1924," the American Railway Car Institute has announced. These orders — many of which, as reported in the *Railway Age* of August 5, were placed in the closing days of July — constitute, the institute says, a "first installment in the continuous program of car buying announced by the Association of American Railroads" following its special member-road meeting at Chicago on July 28. At that meeting, as reported on page 53 of last week's issue, the railroads pledged purchase of over 60,000 additional cars as part of a program for building up to a total of 1,850,000 units the freight-car fleet of Class I roads.

The 30,065 new cars reported ordered during July were divided, 19,490 to independent car builders and 10,575 to railroad shops. The total compares with 2,195 reported ordered in June and 408 in July, 1949.

Deliveries of freight-train cars for domestic use, "which have been increasing steadily for the past few months, declined slightly during July, primarily because of vacation shutdowns," the institute also said. July deliveries totaled 3,464 cars, including 1,326 from railroad shops, as compared with June deliveries of 3,874 cars, including 709 from railroad shops. Included in July deliveries were 1,530 box cars, 599 hopper cars, 521 gondola cars, 10 flat

Better than New!

...repaired with ALCOA ALUMINUM



When you repair with aluminum,
you repair for keeps... because ALUMINUM LASTS

Like many another heavy metal car, this Burlington hopper fought the "battle of corrosion"—and lost. When it came in for repairs, they decided to replace floors and side sheets with Alcoa Aluminum. One immediate result was the lightening of the car by 8,000 pounds. But more important—it was actually *better than new!* No more corrosion problems, because coal acids do not harm aluminum. Longer, continuous useful life. *Much* less maintenance expense. More pay load! It all adds up to more earnings. Recent inspection found the car in excellent condition.

Get the facts and figures on revitalizing your cars with Aluminum

Why not investigate the money-saving advantages of aluminum for hopper repairs? Our engineers will gladly analyze costs and material requirements for your type of car. Call your nearby Alcoa sales office. Or write ALUMINUM COMPANY OF AMERICA, 1816H Gulf Building, Pittsburgh 19, Pennsylvania.

For local source of supply on ALCOA Products, look under *ALUMINUM* in your Classified Telephone Directory

ALCOA FIRST IN ALUMINUM ...THE METAL THAT *LASTS*

ALCOA ALUMINUM

INGOT • SHEET & PLATE • SHAPES, ROLLED & EXTRUDED • WIRE • ROD • BAR • TUBING • PIPE • SAND, DIE & PERMANENT-MOLD CASTINGS • FORGINGS • IMPACT EXTRUSIONS
ELECTRICAL CONDUCTORS • SCREW MACHINE PRODUCTS • FABRICATED PRODUCTS • FASTENERS • FOIL • ALUMINUM PIGMENTS • MAGNESIUM PRODUCTS

cars, 466 refrigerator cars, 145 stock cars and 128 tank cars.

The backlog of cars on order as of August 1 was 67,084, including 25,848 on order from railroad shops, compared with a total of 40,585 on order July 1 and 36,564 on order on August 1, 1949.

The **Missouri Pacific** has ordered a total of 100 one-piece cast steel underframes for pulpwood cars. The design of these frames is similar to that of the pulpwood cars of the Gulf, Mobile & Ohio described in the *Railway Age* of August 5, page 26.

The **Wabash** has announced a car construction program calling for a total of 500 new 50-ton box cars; 300 will be 40½-ft. cars with 8-ft. doors and 200 will be 50½-ft. cars with 14½-ft. doors. The company has ordered material for construction of one depressed center car; and has under consideration the acquisition of 100 mill-type gondola cars and 50 flat cars. Total cost of the 700 new box cars to be acquired by the Wabash and by its subsidiaries, the Ann Harbor and the New Jersey, Indiana & Illinois (see below), not including the gondolas or flat cars, is estimated at $6,400,000. "This expenditure," the road's announcement said, "is being made in fulfillment of a pledge given to the Association of American Railroads" at its July 28 member road meeting in Chicago. (See *Railway Age* of August 5, page 53.)

The **Southern** has requested bids on 2,050 50-ton, 40½-ft. steel-sheathed box cars.

The **Ann Arbor** will purchase 100 50-ton, 40½-ft. box cars.

The **New Jersey, Indiana & Illinois** will purchase 100 50-ton, 50½-ft. box cars with 15-ft. doors.

LOCOMOTIVES

The **Chicago, Milwaukee, St. Paul & Pacific** has placed orders for a total of 15 1,200-hp. Diesel switchers. Fairbanks, Morse & Co., the Baldwin Locomotive Works and American Locomotive-General Electric Companies will each build five locomotives of the total order.

The **Kentucky & Indiana Terminal** has ordered five 1,200-hp. Diesel switchers from Fairbanks, Morse & Co.

The **Louisville & Nashville** order for 41 Diesel-electric locomotive units, which was reported in the *Railway Age* of August 5, page 74, includes 25 road-freight "A" units of either 1,500 or 1,600 hp., and 16 switching units of either 1,000 or 1,200 hp. All units will be built by the Electro-Motive Division of General Motors Corporation.

The **New York Central System** has ordered from Lima-Hamilton Corporation 27 Diesel-electric switching locomotives, at a cost of approximately $2,400,000. The locomotives will be used to complete Dieselization of the Chicago River & Indiana and the Chicago Junction, both Central affiliates. Six of the new locomotives will be of 1,200 hp., and the remaining 21 of 800 hp. each.

SIGNALING

The **Metropolitan Transit Authority** of Boston, Mass., has awarded a contract to the Union Switch & Signal Construction Co., covering installation of an electro-pneumatic interlocking at Orient Heights in East Boston. In addition to a style C control machine, which will be installed at Orient Heights, the contract involves styles A-10 electro-pneumatic switch machines, subway-type color-light signals, electro-pneumatic train stops, relays, rectifiers, transformers and housings.

The **Board of Transportation of the City of New York** has ordered equipment from the General Railway Signal Company for installation of an NX all-relay electric interlocking on Hillside Avenue extension at 167th street. The control machine will have a 35-in. by 162-in. panel equipped with 78 track indication lights, 48 entrance knobs, 29 exit buttons and 15 switch test keys for control of 28 switch machines and 54 signals. Included in this order are model 5 switch machines, type AT color-light signals, type B relays, model 7 switch circuit controllers, train stop equipments and type L oil-cooled transformers.

The **Southern Pacific** has announced the following signal projects, at the indicated estimated costs, in connection with a $2,192,000 general construction authorization: Respacing of signals between Turlock, Cal., and Chowchilla — $107,020; installation of automatic crossing gates at San Bruno avenue, San Bruno, Cal., — $28,595; respacing of signals between San Luis Obispo, Cal., and Casmalia — $89,655, and between Montalvo, Cal., and Chatsworth — $106,700; installation of automatic crossing gates at "A" and First streets, Dixon, Cal., — $35,670; respacing of signals at Goshen Junction, Cal. — $141,295, and respacing of signals between Braymill, Ore., and Chemult — $47,230. Where necessary, all signals respaced are being converted to searchlight type.

The **Texas & New Orleans Lines** of the **Southern Pacific** has placed an order with the Union Switch & Signal Co. for materials to install 19 mechanical facing-point locks on spring switches at the ends of various passing tracks between San Antonio, Tex., and El Paso. This is a continuation of an extensive program of installing mechanical facing-point locks on the San Antonio division. Field installation is being handled by railroad forces.

The **Union Pacific** has announced expenditures totaling $9.5 million on seven signal projects during 1950 and 1951. The projects cover 1,090 mi. of line in Nebraska, Kansas, Wyoming and Oregon. Coded automomatic cab signals will be substituted for continuous automatic cab signals on 224 mi. of double track between North Platte, Neb., and Cheyenne, Wyo., and along 81.5 mi. of single track and 2.5 mi. of double track between Portland, Ore., and The Dalles. Actual work on both projects has just begun, and it is estimated that the North Platte-Cheyenne project will be completed by the end of this year, and the Oregon project by June 30, 1951. Scheduled to begin immediately is installation of centralized traffic control along 80 mi. of track between Topeka, Kan., and Marysville. When completed in December, 1951, this project will give the U.P. a total of 1,102 track mi. of C.T.C. In final stages is installation of coded automatic cab signals on 279 mi. of double track between Omaha, Neb., and North Platte, and also on 250 mi. of double track between Laramie, Wyo., and Green River. Other projects include the replacing of signals between Salina, Kan., and Black Wolf, 45 mi. and between Ellis and Sharon Springs, 126 mi.

ORGANIZATIONS

Tie Producers Meeting

The 32nd annual convention of the Railway Tie Association will be held at the Brown Hotel, Louisville, Ky., on August 28-30. The program, detailed herewith, will consist of many reports and addresses on subjects of direct or indirect interest to railway men. All sessions will be directed by E. W. Jones, president of the association, of the T. J. Moss Tie Company, St. Louis, Mo.

Program

AUGUST 28

Opening business

Address of welcome—F. S. Worthington, superintendent, Southern, Louisville

Address—Partners in the Railroad Industry—Wayne A. Johnston, president, Illinois Central, Chicago

Address—100 Years of Ties on the L. & N.—C. H. Blackman, chief engineer, Louisville & Nashville, Louisville

Report of the Committee on Checking and Splitting of Crossties—J. A. Vaughan, chairman, Southern Wood Preserving Company, Atlanta, Ga.

Address—Stacking Crossties for Seasoning—Paul D. Brentlinger, forester, Pennsylvania, Philadelphia, Pa.

Report of the Committee on Mechanical Handling of Crossties—John Wright, chairman, Koppers Company, Memphis, Tenn.

AUGUST 29

Report of the Committee on Manufacturing Practices—Woodrow Epperson, chairman, Gross & Janes Co., Arkadelphia, Ark.

Address—The Last 50 Years and the Next in the Crosstie Industry—Clarence S. Burt, assistant to vice president, purchases & stores, I. C., Chicago

Address—R. Van Metre, president, Wyoming Tie & Timber Co., Chicago

Report of the Legislative Committee—T. J. Turley, Jr., acting chairman, Bond Brothers, Inc., Louisville

Address—As a Tie Man Sees the Next 12 Months—W. E. Tiller, president, Tiller Tie & Lumber Co., Little Rock, Ark.

Report of the Committee on Concentration Yards—W. J. Chambliss, Jr., chairman, Bond Bros., Inc., Louisville

Annual dinner, to be preceded by reception at 7 p. m.

Meetings & Conventions appear on page 87

AUGUST 30

Report of the Specifications Committee—E. J. McGehee, chairman, Koppers Company, Chicago

Report of the Committee on Timber Conservation—D. B. Mabry, chairman, T. J. Moss Tie Company, St. Louis, including address by R. H. Westveld, chairman Department of Forestry, University of Missouri, Columbia, Mo.

Address—Oak Wilt Disease—Dr. T. W. Bretz, pathologist, Division of Pathology, U. S. Department of Pathology, Columbia, Mo.

Address—What the A.A.R. is Doing to Extend Service Life of Ties—G. M. Magee, research engineer, Engineering Division, Association of American Railroads, Chicago

SUPPLY TRADE

Baldwin, Lima-Hamilton To Be Consolidated

Marvin W. Smith, president of the Baldwin Locomotive Works, and George A. Rentschler, chairman of the executive committee of Lima-Hamilton Corporation, have jointly announced that the boards of directors of their respective companies have approved the substance of a plan to consolidate operations of the two companies under the name of Baldwin-Lima-Hamilton Corporation. The plan will provide for issuance of Baldwin-Lima-Hamilton Corporation common stock on a share-for-share basis to Lima-Hamilton stockholders for the assets of Lima-Hamilton, subject to its liabilities.

Prior to the consolidation, Baldwin will transfer to a subsidiary company its principal "investment" securities, consisting of its common stock holdings of the Midvale Company and the General Steel Castings Corporation and net proceeds from the recent sale of its common stock of the Flannery Bolt Company, amounting to approximately $690,000. The stock of such subsidiary company will be distributed to Baldwin stockholders as a dividend.

The plan is subject to working out all necessary details and to required action by stockholders of both companies. It is proposed that Mr. Rentschler will be chairman of the board, and Mr. Smith president, of the new corporation, assets of which will be valued at approximately $120,000,000.

"The principal products of the two companies," the Smith-Rentschler announcement said, "supplement each other and will result in better diversification. In the Diesel-electric locomotive field there should be substantial advantages in integrating the activities of the two organizations."

The **Superheater Company,** division of **Combustion Engineering-Superheater, Inc.,** has announced the following appointments: **Philip D. Blanchard,** manager of service, with headquarters at East Chicago, Ind.; **H. Gene Harrison,** assistant manager of service at East Chicago; and **Samuel L. Brownlee,** manager of sales, western district, with headquarters in the Bankers building, Chicago. The company also has announced the retirement of **Roy J. Van Meter** as vice-president in charge of western sales and service. He was associated with the Chicago office of the company for more than 32 years.

Ivan E. Howard has been appointed regional supervisor for the Industrial Truck division of the **Clark Equipment Company** in the south central territories, with headquarters at Peoria, Ill. Mr. Howard began his business career as an independent oil dealer and subsequently joined the Caterpillar Tractor Company, working



Ivan E. Howard

on maintenance of hydraulic equipment. After eight years, he returned to the petroleum industry as a lubrication division engineer for the Phillips Oil Company. At the time of his recent appointment he was store manager of a Hyster Company fork-lift truck distributorship operated by that company in Peoria.

Gilbert E. Webster, formerly vice-president and director, has been elected president of the **National Lock Washer Company,** Newark, N. J.

The **American Brake Shoe Company** has made the following new appointments in its Brake Shoe and Castings Division: **Thomas J. Wood,** formerly Eastern district works manager in the operating department of the division, has been appointed chief metallurgist of the division; **Raymond A. Frick,** formerly plant superintendent, has been appointed Eastern district works manager, succeeding Mr. Wood; **Ralph C. White** has been appointed superintendent of the North Kansas City plant, where he has worked as molder, cupola tender and foreman; and **Raymond A. Martinson,** formerly a foreman, has been appointed superintendent of the Chicago plant of the division.

Paul H. Maurer has been appointed vice-president and director of engineering of the **National Pneumatic Company,** with headquarters at Boston, Mass. Mr. Maurer formerly was associated successively with the Bendix Aviation Corporation as development engineer for aircraft electrical equipment and with the Hudson Motor Car Company as electrical engineer. In 1945 he was appointed chief engi-



Paul H. Maurer

neer of National Pneumatic, resigning that position in 1948 to become vice-president in charge of engineering for the Redmond Company of Owosso, Mich. He continued in that capacity until his recent appointment.

J. H. Bunnell & Co., has elected **Roger M. Daugherty** as executive vice-president. At the time of his election, Mr. Daugherty was manager of government sales and engineering and chief engineer of the Colonial Radio division of the Sylvania Electric Prod-



Roger M. Daugherty

ucts Corporation, Buffalo, N. Y. Previous associations include the Crosley Corporation of Cincinnati, Ohio, and the Detrola Corporation at Detroit, Mich., of which he was vice-president from 1941 to 1949.

The **Caterpillar Tractor Company,** Peoria, Ill., has appointed **H. J. Hunkle, Jr.,** as assistant manager of its sales engineering division.

William F. McConnor, formerly vice-president in charge of sales of the **National Tube Company,** a subsidiary of the **United States Steel Corporation,** has been elected executive

vice-president, and **H. J. Wallace** has been elected vice-president in charge of sales, succeeding Mr. McConnor. **William J. McKee,** formerly sales manager, Central area, has been appointed general manager of sales, and **Louis W. Mason,** formerly assistant to general manager of sales, succeeds Mr. McKee.

Ronald K. Evans, vice-president and group executive in charge of the general engine divisions of **General Motors Corporation,** has been elected an executive vice-president, and **Cyrus R. Osborn,** vice-president of General Motors and general manager of its **Electro-Motive Division,** has been appointed to succeed Mr. Evans as group executive in charge of the engine group. **B. A. Dollens,** assistant general manager of Electro-Motive, has been appointed general manager, succeeding Mr. Osborn. All appointments are effective August 15.

Floyd Monteith, Robert Karakoosh, William Collins and **Harold D. Killmer,** formerly service engineers of **Kennametal, Inc.,** Latrobe, Pa., have been appointed sales representatives. Mr. Monteith will work out of the Chicago office and Messrs. Karakoosh, Collins and Killmer will maintain headquarters at Springfield, Mass. **Conrad Seim** has been appointed service engineer at Los Angeles, Cal.

W. H. Winans, industrial relations manager of the **Union Carbide & Carbon Corp.** since 1919, has been elected vice-president—industrial relations.

Malcolm L. Hall, formerly sales manager, testing equipment department, of the **Baldwin Locomotive Works,** at Eddystone, Pa., has been appointed manager of the department, in which capacity he will have complete responsibility for operation of this phase of Baldwin's activities.

CONSTRUCTION

B. & O. Begins Work on New $4-Million Tunnel

Contracts have been awarded for construction of a new $4-million tunnel on the Baltimore & Ohio's main line, five mi. east of Clarksburg, W. Va. Grading for approaches has already begun and it is expected that the job will be completed early in 1952.

The new tunnel will replace Tunnel No. 1, an old bore more than a half-mile long originally built in the 1850s. It will parallel the old bore at a minimum distance of 400 ft., and, because of this new location, will be some 600 ft. longer—a total of 3,300 ft. The new tunnel will have a 0.3 percent rising westbound grade compared with a 1 percent westbound grade for the present tunnel.

The whole improvement will give the B.&O. 2.4 mi. of new line equipped with signals for operation in both directions over either track. The signals will be tied in with the centralized traffic control system in operation in the territory. The improvement also will eliminate reverse curves at both approaches of the old tunnel. The old siding at the west approach will be replaced by three new tracks in the Clarksburg yard. The tunnel itself will have a maximum height of 28 ft. and a width of 31 ft. It will be concrete lined and have a central arch.

The contract for tunnel construction has been awarded to the Bates & Rogers Construction Corp. of Chicago. The contract for approach cuts and other grading has been awarded to the Keeley Construction Company of Clarksburg. Laying of new track will be performed by B.&O. maintenance-of-way forces.

A. C. Clarke, B.&O. chief engineer, will have overall direction of the tunnel job; C. E. Sloan, engineer of bridges, is in charge of design; general supervision of construction work will be carried out by W. W. Gwathmey, Jr., engineer of construction, and J. W. Jones, regional engineer; and field engineer in charge will be Senior Assistant Engineer G. E. Norris.

Atchison, Topeka, & Santa Fe.—Construction of a one-story masonry locker building in the hump yard at Pueblo, Colo., will be undertaken by the Martin K. Eby Construction Company, of Wichita, Kan.

Chesapeake & Ohio.—This road has awarded the following contracts at the indicated probable costs:

To the Virginia Engineering Company, Newport News, Va., for replacing three elevators in Southgate warehouses, Norfolk, Va. ($11,000); to C. L. Lewis, Lynchburg, Va., for leanto and drop pits in roundhouse at Hinton, W. Va. ($35,000); to Albergo Engineering, Chicago, for grading, masonry and track changes incident to grade separation at North D street, Richmond, Ind. ($50,000); to the Chicago Bridge & Iron Co., Chicago, for fuel oil storage tanks for servicing Diesel locomotives at Peru, Ind. ($16,700); and to Jos. T. Ryerson & Son, Chicago, for a Diesel locomotive shop building at Peru ($37,300). The C. & O.'s overall portion of the Richmond, Ind., grade separation will cost approximately $126,600.

The following projects, at the indicated probable costs, have been authorized:

Servicing facilities for Diesel locomotives at Stevens, Ky., Cheviot, Ohio, and Peru, Ind. ($1,192,660); locker building for yard crews, Walbridge, Ohio ($27,200); replacing bridge 19 over Third avenue, Columbus, Ohio ($43,600); and automatic signals and spring switch at east end of double track from Peach Creek, W. Va., to SW cabin ($69,200). In addition, the road's contribution to building a state road underpass at Winifrede Junction, W. Va., will be $30,000.

Chicago & Eastern Illinois.—A former boiler repair shop at Oaklawn shops, Danville, Ill., is being converted into a freight car building and repair unit at an estimated cost of $86,000. The project, which is expected to be complete by December, will enable the road to build its own cars and, in addition, permit servicing of present equipment during inclement weather. (Current car repair facilities at Danville are in the open.) Most of the work is being done by company forces.

Chicago Great Western.—This road will construct two connecting tracks, totaling approximately 0.23 mi. and costing an estimated $16,605, in and near Austin, Minn. Purpose of the tracks is to give the C.G.W. access to approximately 2 mi. of Chicago, Milwaukee, St. Paul & Pacific line at Austin, and permit use of the Milwaukee's passenger station facilities at that city. Under a trackage rights agreement between the two roads, as approved by the I.C.C., the Great Western will also make certain improvements on the Milwaukee's track and roadbed, bringing the total cost to the former to $86,388. The Great Western will pay an annual rental of $15,000 to operate two trains daily over the Milwaukee line and use the latter's passenger station facilities.

Chicago, Rock Island & Pacific.—This road has applied to the I.C.C. for authority to construct 38.37 mi. of main line track from a point near Atlantic, Ia., to Weston. Construction of this new line would in effect reroute the Rock Island's main line between Atlantic and Weston, and would bring about a substantial reduction in operating expenses, the road said. As a part of this same application to the I.C.C., the Rock Island seeks authority to abandon two segments of the present line which would be replaced by the new construction. These segments amount to 11.3 mi. between Atlantic and Walnut, and 20.8 mi. between Shelby and Weston. Construction of the new line would be financed with funds now on hand in the road's treasury, the application stated.

Great Northern.—Approval has been obtained for the following projects, which involve expenditure of $1,785,588; the bulk of the work will be undertaken by company forces:

Extension of passing tracks at various Montana points—$24,428; replacement of No. 11 turnouts with No. 20's at Bow, Mont., and South Bellingham, Wash.—$39,940; bridge repairs at various Montana and Washington points—$209,273; repair of bridges and tunnels, Spokane division—$104 000; construction of liner-type culvert, Ethridge, Mont.—$24,000; repair tunnel linings at three Montana points—$185,000; tunnel drainage, Winton, Wash.—$36,000; renovation of switching and industry tracks, Moorhead, Minn.—$24,850; interlock wye switch, Aberdeen Line Junction, Minn.—$21,150; installation of underground cable, Richmond Beach, Wash., to Ballard—$21,200; enlargement of yard office at 26th st., Sioux City, Iowa—$43,700; repairs to various buildings, Kalispell (Mont.) division—$42,600; construction of dormitory and lunch-and-storage buildings, Kelly Lake, Minn.—$46,500; changes in roundhouse, Great Falls, Mont.—$98,327; addition to paint shop, St. Cloud, Minn.—$22,200; construction of a 25-ton bridge crane, Hillyard, Wash.—$52,800; conversion of boiler power plant, Devils' Lake, N. D., from coal to oil—$41,050; renewal of roof on dock, Everett, Wash.—$40,000; repairs to ore docks and dredging of slips, Allouez, Wis.—$448,850; renewal of pipelines, etc., at treating plant, Hillyard, Wash.—$23,400, and construction of warehouse, Fargo, N. D.—$241,000.

New Orleans Union Passenger Terminal.—Status of various phases

of construction of this publicly-owned passenger terminal is as follows:

(1) A 500,000-gal. Diesel fuel storage tank has been erected by the Chicago Bridge & Iron Co., at a cost of $30,000. The tank, 50 ft. in diameter and 34 ft. high, rests on a 6-in. concrete slab supported on piles.

(2) A steam power plant, to serve both the coach yard and the engine facilities zone, will be constructed by the Keller Construction Corporation, New Orleans, for approximately $40,000. The plant will consist of two 200-hp. Cleaver Brooks package boilers with fully automatic gas operation, to be housed in a Butler Manufacturing Company's prefabricated aluminum building 32 ft. by 48 ft.

(3) The "holding yard" of the terminal has been completed at a cost of $115,000. The facility consists of five tracks of 15 cars capacity each, and has a. c. standby equipment for cars. All work was performed by Illinois Central forces.

(4) The drop pit and car repair facilities, being constructed under contract by the W. Horace Williams Company, are nearing completion, at an estimated cost of $70,000. Trackwork is being handled by I.C. forces.

(5) The main approach track throat, consisting of five main tracks connected by three cross ladders containing No. 8 double slip switches, is now under construction by I.C. forces. The throat will provide universal connection between the main approach tracks, engine zone tracks, coach yard tracks, mail tracks, express tracks and station tracks. Rail of 115-lb. weight is being used in all main tracks.

(6) The 12 station tracks will be installed early this fall by the William A. Smith Construction Company, at an estimated cost of $130,000.

A previous report on construction of the terminal appeared in the *Railway Age* of April 22, page 75.

New York, Chicago & St. Louis.—In cooperation with the U. S. Army Corps of Engineers, this company is presently engaged in relocating and reconstructing, at a total cost of some $2,000,000, the Wheeling & Lake Erie bridge over the Cuyahoga river at Cleveland, Ohio. The new vertical-lift bridge will provide a clear opening of 200 ft. instead of the 78-ft. opening of the existing swing bridge, which has been declared "a hazard to navigation" on the river. The following contracts have been awarded in connection with the project:

To George Vang, Inc., Cleveland, $489,780, for substructure and foundation piers for the new bridge. This contract involves removal of 8,900 cu. yd. of excavation, driving of 47,200 lin. ft. of 10-in. steel pipe piling, and the placing of 3,780 cu. yd. of concrete. The new piers will support 175-ft. steel towers, which will be used to lift the main span to provide 100-ft. vertical clearance over the river channel.

To the McDowell Company, Cleveland, $890,730, for steel superstructure of the new bridge.

To the Horvitz Company, Cleveland, $72,437, for constructing substructure of an approach bridge.

To the McDowell Company and the American Bridge Company, jointly, $49,300, for superstructure of the approach bridge.

Hardesty & Hanover, New York, designed the new bridge and will provide engineering services during its construction, while H. F. Whitmore, chief engineer of the N. Y. C. & St. L., will have general supervision of the railroad's part of the project.

New York, New Haven & Hartford.—This road has authorized the following projects at the indicated estimated costs:

Modernize electric lighting in shops at Van Nest, N. Y. ($25,000); increase overhead clearances of three bridges at Waterbury, Conn. ($26,000); track and signal changes at tower 2.27, Putnam, Conn. ($88,779); servicing facilities for air-conditioning equipment in South station, Boston, Mass. ($116,000); track and signal changes at tower 236, South Bay, Mass. ($33,950), and at tower 237, South Boston, Mass. ($45,900).



A NEW "ZEPHYR LOOK" for conductors and trainmen is being introduced by the Chicago, Burlington & Quincy. Wearing the old-style uniform, Conductor T. G. Turney admires the new medium blue suit worn by fellow-Conductor H. A. Slick. Closer in style to a business suit, the new uniform features completely redesigned "hardware" and is set off by a newly adopted maroon ("Burlington Red") necktie. Pockets for cash fare receipts, ticket punch, tariff, etc., long-established by practical experience, are the only basic feature remaining unchanged. Changeover to the new uniform will take place on all Burlington lines, and will require a year or more to complete

Peoria & Pekin Union.—Company forces are installing two York-Shipley "Steam-Pak" generators (one 150-hp. and one 75-hp.) in the present roundhouse at Peoria, Ill. The installation will cost approximately $35,000 and will furnish heat to the roundhouse and roundhouse offices. A Whiting 15-ton capacity overhead crane and crane bay is also being installed. This work is being done under contract by Fred Harbers Sons, Peoria, at an estimated cost of $37,000.

Southern Pacific.—Projects costing approximately $2,200,000 have been authorized from January 1 to June 30, 1950; almost all of them are to be undertaken by company forces.

Construction of Diesel locomotive servicing facilities at Roseville, Cal., is divided into two units — the first, estimated to cost $196,850, includes construction of two outside inspection and servicing pits 210 ft. in length; Diesel fuel plant consisting of unloading spur, pump house and four fueling masts at the servicing pits; engine cooling water facility consisting of storage and batching tanks and servicing masts at pits; new lubricating oil facilities with storage tanks and outlets at pits, sand facilities, and a locker room. The project also involves construction of 3,335 ft. of track and rearrangement or removal of 10,390 additional ft. of track. The second construction unit covers construction of three 215-ft. servicing pits; one concrete elevated platform with a ramp and connecting platform to future store building; installation of 6,225 ft. of track and rearrangement or removal of another 5,600 ft. The work has necessitated removal of 20 stalls existing steam roundhouse No. 1 and replacement of a 350,000-gal. water tank by three tanks with a capacity of 65,000 gal. each. This unit of the project will cost approximately $389,980. In addition, the road will participate in the cost of modernizing the city of Roseville's sanitary sewage disposal plant at a cost of about $22,500.

Other major construction projects, and their estimated costs, include:

Installation of Diesel service facilities at Eugene yard, Ore.—$53,000; installation of continuous concrete footings in a 400-ft. tunnel at Auburn, Cal.—$26,000; construction of Diesel locomotive servicing facilities at Ogden, Utah, including two concrete inspection pits, fuel and boiler water facilities, sanding facilities, car wheel lathe and additional track—$259,385; construction of Diesel inspection facilities at Sparks, Nev.—$79,365; replacement of a 251-ft. trestle at Nacimiento, Cal., with a ballast-deck structure of a heavier type—$43,330; renewal of the Redding, Cal., freighthouse platform—$21,474 ;renewal of two snow sheds between Norden, Cal., and Donner—$185,155; installation of a ballast deck on the 1,040-ft. steel bridge over the Sacramento river at Mead, Cal.-Lakehead—$67,040; installation of concrete ribs in a tunnel at Westfir, Ore.—$32,340; construction of additional stockyard facilities at Quint st., San Francisco, Cal.—$44,965, and installation of continuous concrete footings in a tunnel at Dorris, Cal., $27,592.

The program also includes construction of additional industrial trackage at Kaiser, Cal., and Lompoc, and construction of tracks over the new Fruitvale Avenue bridge at Fruitvale, Cal., at a total cost of $140,114. Other projects are listed in the Equipment and Supply News column of this issue, under Signaling.

West Virginia Northern.—This road has applied to the I.C.C. for authority to construct approximately 5.8 mi. of branch line, extending from Howesville, W. Va., to a point near Brown's Mills. The new line, the road said, would open up a coal mining area which at present has no rail service. The construction would be financed from current revenues.

ABANDONMENTS

Winona—Winona & Warsaw.—The I.C.C. has denied an application wherein these roads sought authority for the Winona & Warsaw to abandon its entire line, 3.13 mi., between Winona Lake, Ind., and Warsaw, and for the Winona to abandon its entire line, 18.5 mi., between Warsaw and New Paris. The Winona, which holds operating rights over the shorter road, also sought authority to abandon such operation. "Indicated operating losses" are not sufficient to warrant the proposed abandonment, Division 4 found. "The contention that the volume of traffic is declining each year is not supported by the evidence," the division's report added, and it went on to

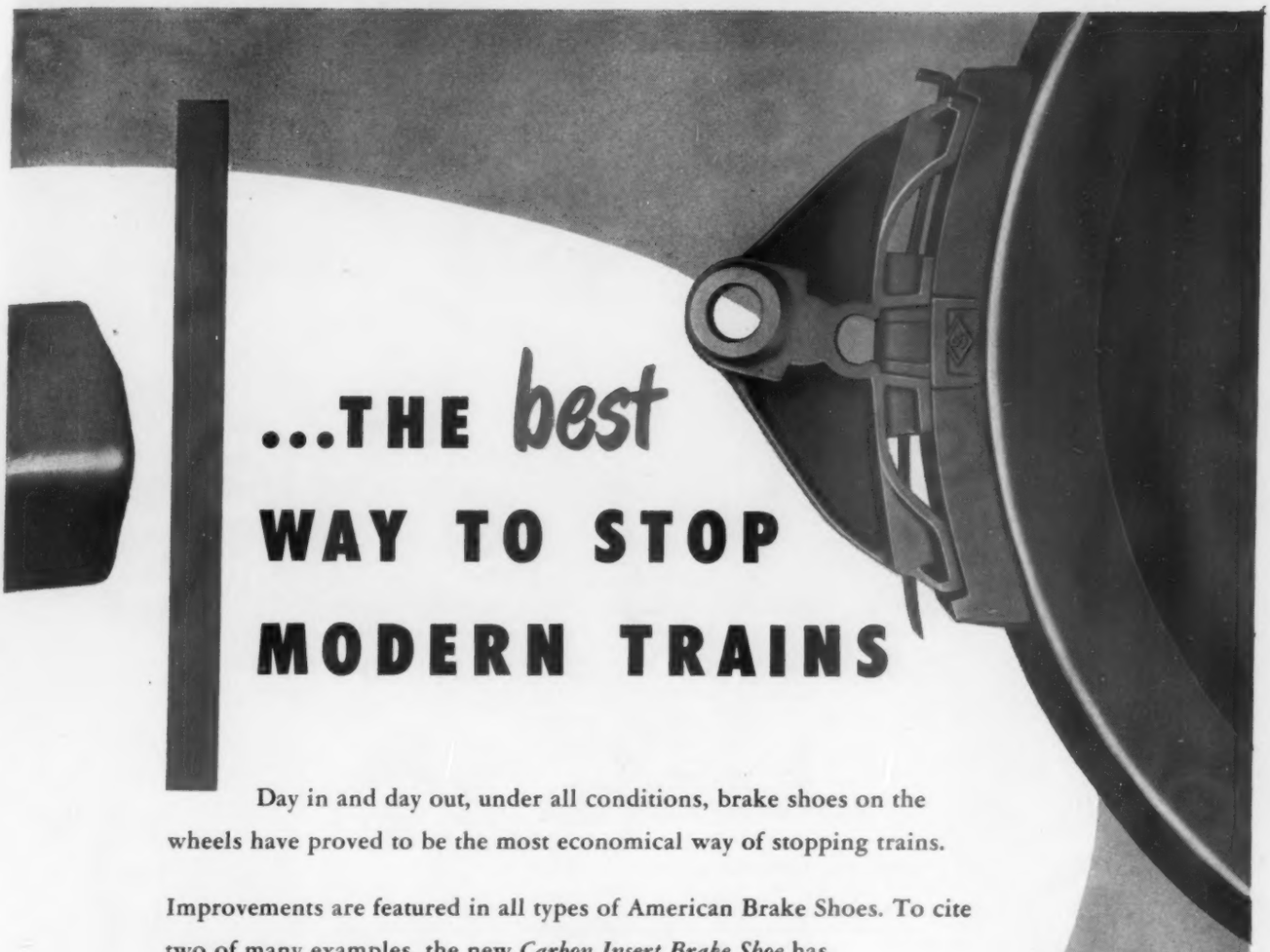
(Continued on page 80)

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BRAKE SHOE AND CASTINGS DIVISION

7260

(Continued from page 77)

say that abandonment would leave numerous industries in Warsaw entirely without rail-transportation facilities. The denial was made without prejudice to the right of renewal at the end of 1950.

Application has been filed with the I.C.C. by:

LEHIGH VALLEY.—To abandon 16.7 mi. of branch line between Ludlowville, N. Y., and Aurora.

LONG ISLAND.—To abandon approximately 4.3 mi. of its Rockaway Beach branch, from 0.2 mi. south of Hamilton Beach, N. Y., to Holland and to abandon approximately 0.3 mi. of its Far Rockaway branch between Holland and Arverne. The road said that on the night of May 7-8 fire destroyed a part of its wooden trestle over Jamaica Bay on the Rockaway Beach branch, and that the estimated cost of repairing the trestle is $739,000 with business already conducted "at a substantial loss" the cost of such repairs is not warranted, the road said.

Division 4 of the I.C.C. has **authorized:**

CHICAGO & NORTH WESTERN.—To abandon 13.9 mi. of branch line from Pratt Junction, Wis., to Paine's Spur.

LEWISTON & YOUNGSTOWN FRONTIER.—To abandon its entire line approximately 6 mi., between Youngstown, N. Y., and Lewiston. The commission's report noted that 10 common-carrier trucking concerns operate in the area served by this line.

SOUTHERN PACIFIC.—To abandon 3.8 mi. of branch line between Bailey Junction, Ore., and Glenbrook.

SOUTHERN PACIFIC.—To abandon approximately 11 mi. of branch line between Kurand, Calif., and Fruto. The application filed with the I.C.C. said the line does not handle sufficient traffic to justify the expense of its maintenance and operation.

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 128 reports (Form IBS) representing 132 steam railways

(SWITCHING AND TERMINAL COMPANIES NOT INCLUDED)

Income Items	United States For the month of April 1950	1949	For the four months of 1950	1949
1. Net railway operating income	$62,216,875	$64,462,096	$186,343,343	$195,970,244
2. Other income	17,013,627	15,918,189	67,475,547	66,336,250
3. Total income	79,230,502	80,380,285	253,818,890	262,306,494
4. Miscellaneous deductions from income	3,854,281	3,271,660	14,761,059	13,107,365
5. Income available for fixed charges	75,376,221	77,108,625	239,057,831	249,199,129
6. Fixed charges:				
6-01. Rent for leased roads and equipment	9,486,761	9,417,613	36,384,625	36,788,540
6-02. Interest deductions[1]	25,007,414	24,858,937	99,896,921	98,620,585
6-03. Other deductions	224,729	193,462	833,944	745,635
6-04. Total fixed charges	34,718,904	34,470,012	137,115,490	136,154,760
7. Income after fixed charges	40,657,317	42,638,613	101,942,341	113,044,369
8. Other deductions	3,127,369	2,971,984	12,835,307	12,286,945
9. Net income	37,529,948	39,666,629	89,107,034	100,757,424
10. Depreciation (Way and structures and Equipment)	35,033,571	33,138,022	139,586,859	131,686,532
11. Amortization of defense projects	1,366,965	1,374,616	5,496,075	5,480,883
12. Federal income taxes	26,546,039	26,001,351	84,010,107	85,350,404
13. Dividend appropriations:				
13-01. On common stock	4,585,789	2,968,177	42,668,680	49,340,419
13-02. On preferred stock	529,162	529,233	23,829,736	23,127,195
Ratio of income to fixed charges (Item 5÷6—04)	2.17	2.24	1.74	1.83

Selected Expenditures and Asset Items	United States Balance at the end of April 1950	1949
17. Expenditures (gross) for additions and betterments—Road	$74,088,266	$100,977,218
18. Expenditures (gross) for additions and betterments—Equipment	216,338,967	370,107,204
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	485,916,745	517,653,051
20. Other unadjusted debits	110,867,097	132,827,388
21. Cash	840,808,451	804,358,301
22. Temporary cash investments	795,305,564	898,416,914
23. Special deposits	117,264,373	125,076,557
24. Loans and bills receivable	1,094,766	773,485
25. Traffic and car-service balances—Dr	51,211,506	53,671,663
26. Net balance receivable from agents and conductors	127,244,136	116,303,549
27. Miscellaneous accounts receivable	267,521,508	299,554,073
28. Materials and supplies	716,868,234	882,316,767
29. Interest and dividends receivable	16,080,590	13,494,785
30. Accrued accounts receivable	171,331,974	143,601,371
31. Other current assets	31,534,612	38,744,740
32. Total current assets (items 21 to 31)	3,136,265,714	3,376,312,205
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$125,207,085	$171,541,222
41. Loans and bills payable[3]	8,804,845	3,159,150
42. Traffic and car-service balances—Cr	88,168,912	76,170,655
43. Audited accounts and wages payable	473,451,338	514,323,058
44. Miscellaneous accounts payable	213,361,491	221,557,178
45. Interest matured unpaid	44,917,370	48,209,059
46. Dividends matured unpaid	4,732,809	4,084,756
47. Unmatured interest accrued	66,220,452	63,280,921
48. Unmatured dividends declared	20,117,071	27,118,063
49. Accrued accounts payable	173,208,650	196,597,074
50. Taxes accrued	603,298,618	744,510,657
51. Other current liabilities	77,053,758	71,644,843
52. Total current liabilities (items 41 to 51)	1,773,335,314	1,970,655,414
53. Analysis of taxes accrued:		
53-01. U. S. Government taxes	458,058,432	611,108,272
53-02. Other than U. S. Government taxes	145,240,186	133,402,385
54. Other unadjusted credits	256,736,427	271,382,334

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

FINANCIAL

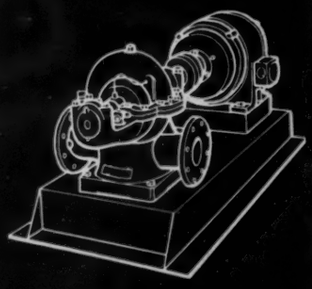
Atlantic Coast Line-Louisville & Nashville. — *Bonds of Carolina, Clinchfield & Ohio.*— The I.C.C. has dismissed without prejudice the application filed by these roads on March 14 wherein they sought authority to issue $3,885,000 in first mortgage series B bonds of the C.C.&O. (See *Railway Age* of March 18, page 89.) The commission's action was taken after the A.C.L. and L.&N. filed a motion to withdraw the application.

Boston & Providence.—*Reorganization.*—The I.C.C. has made a part of the record in this proceeding a report prepared by its Bureau of Valuation. The report, dated July 17, resulted from the bureau's investigation of the elements of value, as of December 31, 1948, of the property of the B.&P.

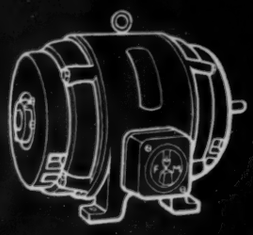
Delaware, Lackawanna & Western.—*Stockholders Approve Bond Refunding Plan.*—Stockholders of this company, at a special meeting, have approved the refunding of $19,356,000 of Morris & Essex construction mortgage bonds, due 1955. The plan, detailed in the *Railway Age* of April 8, page 63, and June 10, page 84, involve exchange of $400 in cash and $600 in new Pennsylvania division refunding mortgage and collateral trust bonds for each $1,000 of M. & E. Bonds. Cash will come from sale to the Metropolitan Life Insurance Company of Pennsylvania division first mortgage bonds. The exchange offer will remain open until September 15. More than 65 per cent of the company's outstanding stock was voted in favor of the proposal and only 1.11 per cent against it.

Gulf, Mobile & Ohio.—*Trackage Rights into Birmingham, Ala.*—The I.C.C. has authorized the Alabama Great Southern to intervene in connection with this road's proposal to acquire a new route into Birmingham, Ala. (See *Railway Age* of May 13, page 68.) The A.G.S. said the Louisville & Nashville line, between Tuscaloosa, Ala., and Birmingham, over which the G.M.&O. would acquire trackage rights, is directly competitive with that of the A.G.S., and asked for permission to intervene in the case "for the protection of its interests."

Gulf, Mobile & Ohio.—*Trackage Rights into Birmingham, Ala.*—The New Orleans & Northeastern has been authorized by the I.C.C. to intervene in connection with this road's proposal to acquire a new route into Birmingham, Ala. The proposed new G.M.&O. route would involve the acquisition of trackage rights over 56.5 mi. of Louisville & Nashville line between Tuscaloosa, Ala., and Birmingham. In asking permission to intervene in the case, New Orleans & Northeastern said that its line forms part of a



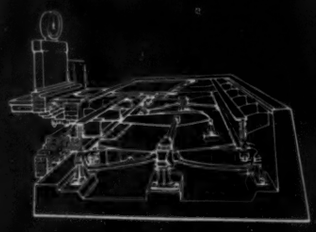
Centrifugal Pumps



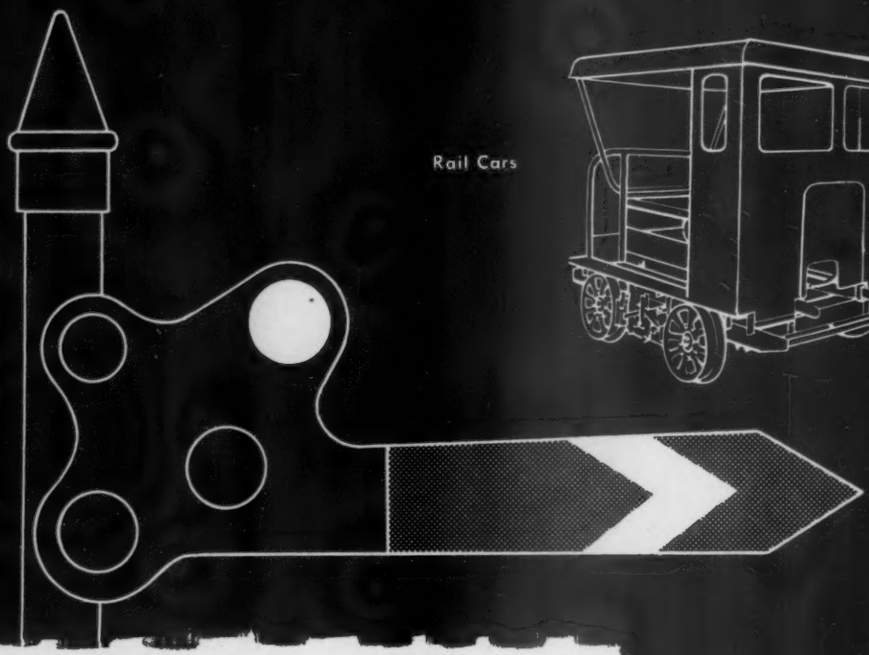
Electric Motors
and Generators



Turbine Pumps



Truck Scales



Rail Cars

FOR RAILROAD EQUIPMENT

IT'S

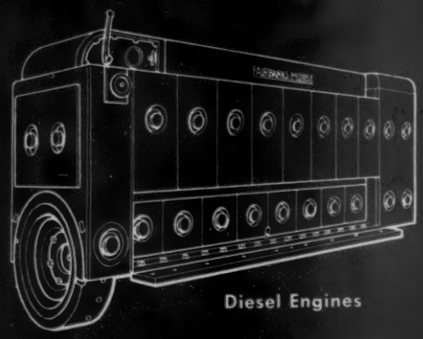
FAIRBANKS-MORSE,

a name worth remembering

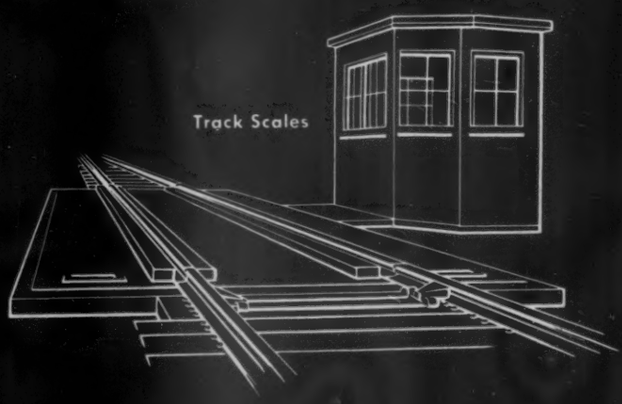
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Water, Coal and
Sanding Stations



Diesel Engines



Track Scales

through route between Birmingham and points south thereof, and that the route sought by the G.M.&O. would be "directly competitive."

New York Central.—*Trackage Rights.*—Division 4 of the I.C.C. has approved a new trackage rights agreement between this road and the New York, Ontario & Western, covering use by the N.Y.C. of approximately 12.9 mi. of Ontario & Western tracks between Fulton, N. Y., and Oswego. Estimated annual payments total $25,140 for the N.Y.C., covering rental on the joint line and a proportionate share of operating expenses for the passenger station at Fulton. The road expects to realize annual savings of approximately $44,681, principally by elimination of overtime wages as a result of the shorter route into Oswego.

New Securities

Application has been filed with the I.C.C. by:

KANSAS CITY SOUTHERN.—To assume liability for $2,700,000 of series K equipment trust certificates to finance in part 26 Diesel-electric locomotives, costing an estimated $3,346,680. The locomotives, all from Electro-Motive Division, General Motors Corporation, would consist of six 1,500-hp "A" unit freight locomotives at $153,270 each, ten 1,500-hp "B" unit freight locomotives at $141,835 each, and ten 1,200-hp switching locomotives at $100,871 each.

The certificates, to be dated September 1, would mature in 15 annual installments of $180,000 each, beginning September 1, 1951. They would be sold by competitive bids, with the interest rate to be set by such bids.

Dividends Declared

Delaware & Bound Brook.—50¢, quarterly, payable August 20 to holders of record August 13.

North Pennsylvania.—$1, quarterly, payable August 25 to holders of record August 18.

Pittsburgh & West Virginia.—(resumed) 50¢, payable September 15 to holders of record August 15.

Pittsburgh, Youngstown & Ashtabula.—7% preferred, $1.75, quarterly, payable September 1 to holders of record August 18.

Virginian.—6% preferred, 37½¢, quarterly, payable November 1, February 1, 1951, May 1, 1951, and August 1, 1951, to holders of record October 17, January 16, 1951, April 17, 1951, and July 17, 1951.

Security Price Averages

	August 8	Last week	Last year
Average price of 20 representative railway stocks	46.42	46.50	38.54
Average price of 20 representative railway bonds	95.23	94.19	85.29

RAILWAY OFFICERS

EXECUTIVE

At a meeting of the board of directors of the Kentucky & Indiana Terminal, **Lee L. Babcock** was elected vice-president — industrial relations, with headquarters, as before, at Louisville, Ky.

James P. Reinhold, representative of the president, Atchison, Topeka & Santa Fe, has been appointed assistant to the president—public relations—effective August 1. Mr. Reinhold succeeds the late M. Lee Lyles, whose death, on July 21, was recorded in the *Railway Age* of July 29, page 63. In his new capacity Mr. Reinhold will have headquarters at Chicago.

David I. Mackie, general counsel of the Delaware, Lackawanna & Western, has been elected also a vice-president of the company, with headquarters as before at New York. **Harry C. Schmidt,** general freight traffic manager, has been appointed assistant vice-president, traffic department, also with headquarters as before at New York. The position of general freight traffic manager has been abolished.

E. A. Sweeley, general mechanical superintendent of the Fruit Growers Express, the Western Fruit Express and the Burlington Refrigerator Express at Alexandria, Va., has been appointed assistant to president of those companies at Washington, D. C.

Mr. Sweeley has had almost a half century of railroad and refrigerator car line service. Starting with the New York Central in 1902, he served in an official capacity with a number of other railroads, including the Atlantic Coast Line and the Seaboard Air Line, until appointed a member of the former

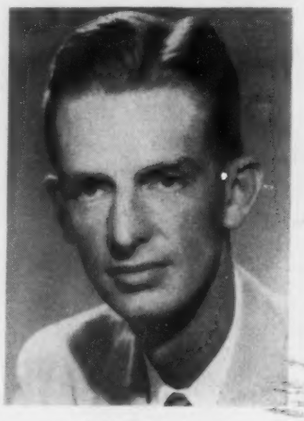


E. A. Sweeley

Railroad Adjustment Board under the United States Railroad Administration, 1918 to 1920. Mr. Sweeley entered F.G.E. service in May, 1920, as mechanical superintendent, and became general mechanical superintendent of the three companies in May, 1947.

OPERATING

As reported in *Railway Age* of July 8, **L. W. Menk** has been promoted to superintendent of the Central division, St. Louis-San Francisco, with headquarters at Fort Smith, Ark. Mr. Menk, a native of Colorado, entered railroad service in 1937 as a telegraph messenger on the Union Pacific. He joined the Frisco in 1940 as a telegrapher on the southwestern division, and in April, 1941, was appointed dispatcher at Tulsa, Okla. Subsequently he held the positions of assistant trainmaster at Newburg, Mo., trainmaster for the southern division at Thayer and assistant superintendent of the river division and eastern division. In November, 1949, Mr. Menk was appointed



L. W. Menk

terminal trainmaster at Memphis, Tenn., in which capacity he was serving at the time of his promotion.

C. B. Faulkner, assistant trainmaster of the Wilmington district of the Atlantic Coast Line at Wilmington, N. C., has been appointed trainmaster of the Columbia district at Florence, S. C. **H. F. Newland,** transportation assistant, succeeds Mr. Faulkner.

Arthur H. Salmon, chief clerk to the general superintendent of the New Brunswick district of the Canadian Pacific at St. John, N. B., has been appointed assistant superintendent of the Sudbury division at Sudbury, Ont.

K. C. Lewis, assistant manager of real estate and industrial development of the Delaware & Hudson, has been appointed manager of real estate and industrial development, with headquarters as before at Albany, N. Y., succeeding **B. D. Anthony,** deceased.

TRAFFIC

As reported in the *Railway Age* of July 8, **Edward W. Brunck,** assistant freight traffic manager of the New York Central System at Detroit, Mich., has been promoted to freight traffic manager at that point, succeeding **Oswald R. Bromley,** who has retired after 45 years of service because of his health. Mr. Brunck was born on January 16, 1883, at Lancaster, N. Y., and was educated in the public schools of Buffalo, N. Y. He began his railroad career in 1901 with the N. Y. C. & Hudson River (now N. Y. C.) as a stenographer and clerk in the local freight office at Buffalo. The next year he was transferred to the office of the division freight agent at that point, remaining there until 1908 when he became secretary to the manager of the N.Y.C. Fast Freight Lines. In 1916 he was made chief clerk, and a year later was transferred to Detroit, where he served as chief clerk to the general



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freight agent of the Michigan Central. Mr. Brunck was appointed assistant general freight agent in 1919, and advanced to general freight agent in 1924. He became assistant freight traffic manager in 1927.



Edward W. Brunck

Mr. Bromley was born in Detroit on August 22, 1884, and entered railroad service in 1900 as clerk to the freight claim agent of the M.C. at Detroit. From 1902 to 1905 he held various positions with the Detroit United, subsequently returning to the M. C. to serve continuously in clerical capacities until 1915, except between April and November, 1908, when he was employed on the Ann Arbor. In 1915 he was made division freight agent on the M. C. at Grand Rapids, Mich., and in June, 1918, was appointed assistant general freight agent, coal traffic, at Detroit, becoming senior assistant general freight agent there the following July. He was advanced to general freight agent in 1920, and four years later was promoted to freight traffic manager. From 1927 to 1932 Mr. Bromley served as traffic manager of the M. C. at Detroit, and subsequently became freight traffic manager of the N. Y. C. system there.

George F. Berkemer, district freight and passenger agent of the Pennsylvania at New Orleans, La., has been transferred to Chicago.

The Southern Pacific has announced the following promotions: **W. H. Stakelum** appointed assistant freight traffic manager in charge of rates and divisions for lines in Texas and Louisiana, at Houston, Tex.; **R. A. Cooper,** district freight agent, appointed general freight agent, Central territory, with headquarters as before at Houston; **O. E. Corey** appointed general freight agent, rates and divisions, and **Henry Best** appointed assistant general freight agent, both at Houston. **J. H. Tate,** former district freight agent at Beaumont, Tex., has been transferred in the same capacity to Houston. **E. L. Bourg,** former traveling freight agent at Beaumont, has been appointed district freight agent at that point.

Albert W. Cray has been appointed general agent of the New York, Ontario & Western at Buffalo, N. Y., succeeding **Victor E. Konz,** who, at his own request, has returned to New York as commercial agent. **J. K. Callaghan,** commercial agent at Boston, Mass., has been promoted to general agent at Cleveland, Ohio, succeeding **E. A. Blomberg,** who has been transferred to Pittsburgh, Pa.

MECHANICAL

H. J. Stein, mechanical engineer of the Atlantic Coast Line, has been appointed chief mechanical engineer, with headquarters as before at Wilmington, N. C.

J. M. Pierce, whose retirement as superintendent of machinery of the Kansas City Southern Lines, at Pittsburg, Kan., was reported in the *Railway Age* of July 8, was born February 7, 1885, at Paris, Tenn. He entered railroad service in November, 1908, as a machinist with the K. C. S. at Shreveport, La. In 1914 he was appointed roundhouse foreman, and, in 1918, general foreman, becoming master mechanic at Heavener, Okla., in 1922. From 1923 to 1929, Mr. Pierce served as master mechanic at Shreve port, and subsequently at Pittsburg until 1931, when he was appointed general master mechanic at the latter point. He returned to Shreveport in 1937 as master mechanic, being made general master mechanic there in 1944. Later the same year he was promoted to superintendent of machinery.

PURCHASES & STORES

The Toledo, Peoria & Western has announced the promotion of **I. V. Cohen** to the position of general purchasing agent.

The Chicago, Milwaukee, St. Paul & Pacific has announced the following appointments in its stores department, occasioned by retirements of five storekeepers: **J. V. Anderson,** as assistant general storekeeper at Tacoma, Wash., succeeding **J. C. MacDonald; L. F. Anderson,** storekeeper at Bensenville, Ill., as division storekeeper, Chicago terminals, succeeding **E. H. Lyons; H. Patton,** storekeeper at West Clinton, Ind., as division storekeeper, Terre Haute division, at Terre Haute, Ind., succeeding **C. W. Pearce; J. J. Dorsey,** division storekeeper, Rocky mountain division, at Deer Lodge, Mont., as division storekeeper, at Mason City, Iowa, succeeding **C. C. Smola; W. G. McGowan,** as Mr. Dorsey's successor; and **A. P. Roe,** as stationery storekeeper at Milwaukee, Wis., succeeding **John Waldman.**

George H. Bolton, tie and timber agent of the Boston & Maine, has been appointed purchasing agent, with headquarters as before at Boston, Mass. **E. R. Rand,** buyer, has been appointed tie and timber agent.

ENGINEERING & SIGNALING

As announced in the *Railway Age* of July 29, **A. O. Wolff,** engineer, maintenance of way, of the Eastern region of the Canadian Pacific at Toronto, Ont., has retired. Mr. Wolff was graduated in engineering from the Royal University in Copenhagen, Denmark. He joined the C.P. as a rodman at Montreal, Que., in 1908 and saw service on the old Lake Superior division, the Maritimes and Western Ontario divisions before being appointed assistant district engineer at Toronto in 1938. The following year he was appointed district engineer of the New Brunswick district and in 1946 he returned to Toronto as assistant engineer, maintenance of way. Mr. Wolff was appointed engineer, maintenance of way, of the Eastern region in 1948.

SPECIAL

Charles E. Kane, executive assistant in the field of public relations, has retired because of ill health after nearly 30 years service with the Illinois Central. **Clifford G. Massoth,** editor of the "Illinois Central Magazine" will continue in his present capacity but will henceforth head the road's public relations staff as well. **Arthur C. Carlson,** assistant in public relations, has been named manager of public relations.

William J. Cleary, air express publicity representative of the Railway Express Agency, has been appointed editor of publications at New York, succeeding **Stanley W. Todd,** who has retired after 38 years of continuous service.

OBITUARY

William J. Gemeiner, 76, who retired in 1944 as assistant general freight agent of the Delaware, Lackawanna & Western at New York, died on August 1 at his home in East Orange, N. J.

William M. Kennedy, 68, superintendent of the relief department of the Baltimore & Ohio at Baltimore, Md., died from a heart attack on August 2 at his home in that city.

George W. Brown, vice-president and general manager of the Escanaba & Lake Superior, died recently of a heart attack at his home in Wells, Mich. Mr. Brown was born on December 19, 1879, at Weyauwega, Wis., where he attended high school. He entered railroad service as a telegrapher for the Chicago & North Western, and later for the Minneapolis, St. Paul & Sault Ste. Marie. Mr. Brown become associated with the E.&L.S. in 1910, as agent at Escanaba. He was promoted to the position of superintendent in 1928, when he was moved from Escanaba to Wells. His appointment as vice-president and general manager was made in 1946.

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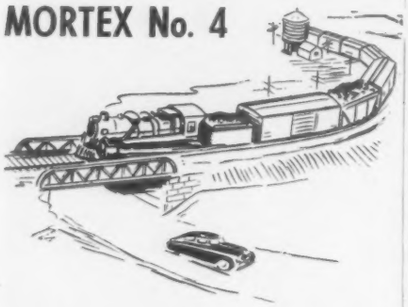
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Current Publications

PERIODICAL ARTICLE

The Railroad That Flattened the Mountains, by Syd Barksdale. The Commonwealth, June, 1950, pp. 11 et seq. Published by the Virginia State Chamber of Commerce, 111 North Fifth St., Richmond 19, Va. Single copies, 20 cents.

Covers the historical development of the Clinchfield, with emphasis on its financing and construction.

BOOKS

Exploring Our National Parks and Monuments, by Devereux Butcher, 224 pages, illustrations, maps. Prepared under auspices of the National Parks Association and published by Houghton, Mifflin Company, Boston, Mass. Paper-bound, $2.00; cloth-bound, $3.50.

With a profusion of excellent wildlife and scenery photographs (227 in all), this book is well calculated to whet the travel urge. Written officially for the National Parks Association, it contains a complete description of every national park and monument —scenic wonders, animals, birds and plants. The book includes full information on how to reach each park and monument by rail, bus and automobile and in addition describes available accommodations — hotels, lodges, campgrounds and recreation facilities. The author, an authority on conservation and wildlife, is currently executive secretary for the N.P.A. Many of the photographs are his own. It has been suggested that this book would be useful as a reference work in passenger traffic offices where vacation travel is a factor in ticket sales. It also might prove to be a travel stimulator if placed in lounge and observation cars, not only on trains which tap the vacation areas, but also on trains where so-called commercial travel is heavy and where, as "escape literature," its seeds of the travel urge would be planted in fertile soil.

Railroads of Chicago. Published by Kalmbach Publishing Company, 1027 N. 7th st., Milwaukee 3, Wis. $1.

This is Book 18 in "Trains Album of Railroad Photographs" series. It consists of 59 photographs, ranging in size up to 12 in. by 9¼ in., which show terminals, yards and main lines, and Diesel, steam and electric locomotives.

TRADE PUBLICATION

G.R.S. Automatic Switching for Car Retarder Yards; Pamphlet 695, June, 1950. 26 pages, illustrations, diagrams. Published by General Railway Signal Company, Rochester 2, N. Y. Free.

To further simplify and expedite yard operations, the General Railway Signal Company offers the new development of automatic switching. With this, and the G.R.S. car retarder system, all retarders in a yard of any size are operated from one control tower. The routes for cuts of cars are selected by pushing buttons at the hump, one push-button being identified with each classification track. This system of switching was described in the *Railway Age* of March 11.

PAMPHLETS

Recommended Carloading Patterns for Canned Goods. 32 pages, illustrations, charts, diagrams. Published by the Union Pacific. Copies available on request from O. J. Wullstein, general freight claim agent, U.P., 1416 Dodge st., Omaha 2, Neb.

Designated as the first of a series of commodity pamphlets, this publication is being distributed to canning associations, wholesale grocer associations and their members, railroads, shippers advisory boards and shippers of various types of case goods, in an effort to reduce the loss and damage this type of traffic sustains. A total of 16 safe loading patterns for the case sizes most commonly shipped are clearly diagrammed, while a combination of photos and sketches give visual treatment to the discussion of doorway protection, unitized loading, loading mixed sizes, stopover cars and the sealing of cases. Three tables showing the cumulative stacking heights of cases, the lengthwise space occupied by blocks of various cases and box dimensions as approved by the National Bureau of Standards, are also featured.

Speaking Can Be Easy. . .for Engineers, too. Prepared by the Committee on Relations With Industry of the American Society for Engineering Education. 24 pages, illustrations. Distributed by the Engineers' Council for Professional Development, 29 W. 39th st., New York 18. 50 cents.

A practical pocketsize manual written by a special committee to help engineers become better speakers and hold better meetings. It is divided into two sections. In "The Speakers" section the following subjects will be found of particular value: What type of speech?, planning and preparation, attention patterns, platform manners, and microphone technique. Of special interest to the chairman is "The Meeting" section with its treatment of effective introductions, starting and handling questions, and assuring bigger and better audiences. Illustrations in a humorous vein are used to emphasize major points. Included also are 12 carefully selected references for further help on various phases of speech psychology and effective speaking.

Canada from Sea to Sea. 128 pages, illustrations, map. Published by the Department of External Affairs, Ottawa, Ont.

Land, climate and people are generally recognized as the chief elements in the making of a nation. What the people do with the land and its resources, helped or hindered by climate, makes the country's economic history. How they organize their united strength for freedom and security makes their political history. Social and cultural development can be measured by the extent to which people master their environment and build on the traditions they have inherited. The development of Canada has been made the more difficult by the exceptional diversity and variety to be found in all three elements: people, land and climate. It is against this background that an attempt has been made in this booklet to indicate, necessarily in outline only, the political, economic, social and cultural achievements of Canadians up to the present time.

ORGANIZATIONS

(*Continued from page 75*)

Meetings & Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings.

AIR BRAKE ASSOCIATION.—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4, Ill. Annual meeting, September 18-20, 1950, Hotel Sherman, Chicago, Ill.

ALLIED RAILWAY SUPPLY ASSOCIATION.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill. Annual meeting, September 18-20, 1950, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, June 5-7, 1951, Atlantic City, N. J.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C.R.R. of N. J., 143 Liberty St., New York 6, N. Y. Annual meeting October 24-27, 1950, Hotel Nacional, Havana, Cuba.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill.

AMERICAN ASSOCIATION OF TRAVELING PASSENGER AGENTS.—C. A. Melin, P. O. Box 5025, Cleveland 1, O. Annual meeting October 9-10, 1950 McAllister Hotel, Miami, Fla.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 18-20, 1950, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—E. L. Beardsley, Denver & Rio Grande Western, Denver 2, Colo. Annual meeting, April 18-20, 1951, Chase Hotel, St. Louis, Mo.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 13-15, 1951, Palmer House, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—W. B. Grumley, Nickel Plate Road Magazine, 432 Terminal Tower, Cleveland 1, O. Annual meeting, November 2-4, 1950, Copley-Plaza Hotel, Boston, Mass.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—C. E. Huntley, 2000 Massachusetts Ave., N. W., Washington 6, D. C. Annual meeting, October 3-4, 1950, Mayo Hotel, Tulsa, Okla.

AMERICAN SOCIETY FOR TESTING MATERIALS.—R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa.

AMERICAN SOCIETY OF MECHANICAL ENGINEER.—C. E. Davies, 29 W. 39th St., New York 18, N. Y.

Railroad Division.—E. L. Woodward, *Railway Mechanical and Electrical Engineer*, 79 W. Monroe St., Chicago 3, Ill.

AMERICAN WOOD-PRESERVERS' ASSOCIATION.—H. L. Dawson, 839 Seventeenth St., N. W., Washington 6, D. C.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.—R. A. Ellison, Cincinnati Chamber of Commerce, Federal Reserve Bank Bldg., Cincinnati 2, O. Annual meeting, October 16-18, 1950 (tentative), Hotel Commodore, New York, N. Y.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo. Annual meeting, October 10-12, 1950, Hotel Statler, New York, N. Y.

ASSOCIATION OF AMERICAN RAILROADS.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department.—J. H. Aydelott, Vice-President, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division.—L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section.—A. H. Grothmann, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, October 17-19, 1950, French Lick Springs Hotel, French Lick, Ind.

Fire Protection and Insurance Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, October 17-19, 1950, Sheraton Hotel, Chicago, Ill.

Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.

Medical and Surgical Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Protective Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Safety Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Engineering Division.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 13-15, 1951, Palmer House, Chicago, Ill.

(*Continued on page 88*)

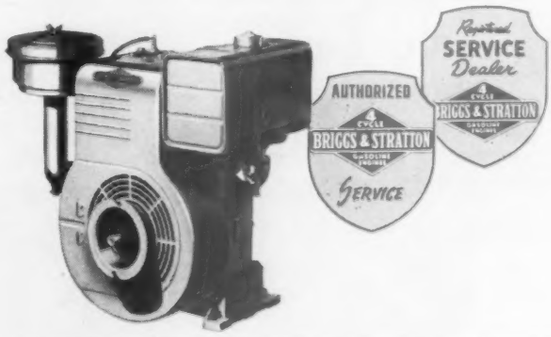


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Electrical Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. September 18-20, 1950, Hotel Sherman, Chicago, Ill.

Signal Section.—R. H. C. Balliet, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting September 18-20, 1950, Hotel Statler, New York, N. Y.

Mechanical Division.—Fred Peronto, 59 E. Van Buren St., Chicago 5, Ill.

Electrical Section.—Fred Peronto, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, September 18-20, 1950, Hotel Sherman, Chicago, Ill.

Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C.

Freight Claim Division.—C. C. Beaupríe, 59 E. Van Buren St., Chicago 5, Ill.

Motor Transport Division.—Transportation Bldg., Washington 6, D. C.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance, Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting October 18-20, 1950, Broadmoor Hotel. Colorado Springs, Colo.

Traffic Department.—Walter J. Kelly, Vice-President, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF INTERSTATE COMMERCE COMMISSION PRACTITIONERS.—Sarah F. McDonough (Executive Secretary) 2218 I.C.C. Building, Washington 25, D. C. Annual meeting, November 9-10, 1950, Hotel Jefferson, St. Louis, Mo.

ASSOCIATION OF RAILROAD ADVERTISING MANAGERS.—R. P. Schaffer, Chicago & North Western Ry., 400 W. Madison St., Chicago 6, Ill.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Gulf, Mobile & Ohio R. R., 104 St. Francis St., Mobile 5, Ala.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION. E. C. Gunther, Duff-Norton Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill. Exhibit in conjunction with meeting of American Railway Bridge & Building Association, September 18-20, 1950, The Coliseum, Chicago, Ill.

CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis 3, Mo. Regular meetings, fourth Tuesday of each month, except June, July and August, Hotel DeSoto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill. Annual meeting, September 18-20, 1950. Hotel La Salle, Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—J. A. Dingess, 8637 South Euclid Ave., Chicago 17, Ill. Regular meetings, second Monday of each month, except June, July and August, LaSalle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—R. E. Mann, Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

COORDINATED RAILROAD MECHANICAL ASSOCIATIONS.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill. Annual meeting, September 18-20, 1950, Hotel Sherman, Chicago, Ill.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—H. J. Hawthorne, Union Railroad, East Pittsburgh, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION.—W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February (Annual Dinner), March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Lipscomb, 1721 Parker St., North Little Rock, Ark. Annual meeting, September 18-20, 1950, Hotel Sherman, Chicago, Ill.

MAINTENANCE OF WAY CLUB OF CHICAGO.—E. C. Patterson, 400 W. Madison St., Chicago 6, Ill. Regular meetings, fourth Monday of each month, October through April, inclusive, except December, when the third Monday, at Eitel's Restaurant, Field Bldg.

MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany 3, N. Y. Annual meeting, September 18-20, 1950, Hotel Sherman, Chicago, Ill.

METROPOLITAN MAINTENANCE OF WAY CLUB.—Walter L. Turner, Jr., Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Meets in February, April, October, and December.

MILITARY RAILWAY SERVICE VETERANS.—S. Thomson, 1061 W. Sheridan Road, Chicago 40, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—S. Allyson, (Acting Sec'y), 7413 New Post Office Bldg., Washington 25, D. C. Annual meeting, November 13-16, Hotel Westward Ho, Phoenix, Ariz.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS. — A. P. Little, Dennison Manufacturing Company, Framingham 12, Mass. Annual meeting, October 4-5, 1950, Shirley-Savoy Hotel, Denver, Colo.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION.—Miss Lois E. Casavant, 930 F. St., N. W., Washington 4, D. C. Annual meeting, October 16-18, 1950, Palace Hotel, San Francisco, Cal.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE. — Edward F. Lacey, Suite 450, Munsey Bldg.. Washington 4, D. C. Annual meeting, November 16-17, 1950, St. Francis Hotel, San Francisco, Calif.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—R. B. Fisher, 59 E. Van Buren St., Chicago 5, Ill.

NATIONAL SAFETY COUNCIL, RAILROAD SECTION.—J. R. Thexton, Delaware, Lackawanna & Western R.R. Co., Hoboken, N. J. Annual meeting, October 17-19, 1950, Hotel Morrison, Chicago, Ill.

NEW ENGLAND RAILROAD CLUB.—William M. McCombs, 35 Lewis Wharf, Boston 10, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB.—D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y.

NORTHWEST CARMEN'S ASSOCIATION. — G. H. Wells, Northern Pacific Railway, St. Paul 1, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

NORTHWEST LOCOMOTIVE ASSOCIATION. — R. M. Wigfield, Northern Pacific Ry., Room 1134, G. O. Bldg., St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB.—S. E. Byler, 121 E. Sixth St., Los Angeles 14, Cal. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Cal.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago 3, Ill.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August. Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price, Allen-Bradley Company, 445-447 N. LaSalle St., Chicago 10, Ill. Exhibit in conjunction with meetings of Coordinated Railroad Mechanical Associations and Electrical Sections of Association of American Railroads, September 18-20, 1950, Hotel Sherman, Chicago, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION. — L. H. Peters, New York Central, Room 1213, 139 W. Van Buren St., Chicago, Ill. Annual meeting, September 18-20, 1950, Hotel Sherman, Chicago 5, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—A. W. Brown, 60 E. 42nd St., New York 17, N. Y.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section of A.A.R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 912 Shell Building, St. Louis 3, Mo. Annual meeting August 28-30, 1950, Brown Hotel, Louisville, Ky.

ROADMASTERS AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 18-20, 1950, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A.A.R. Signal Section.

SOUTHEASTERN DIESEL RAILWAY CLUB. — John Sims, P. O. Box 155, Buena Vista Station, Miami 37, Fla. Regular meetings, second Tuesday in February, April, June, August, October and December, 9:30 a.m., Mayflower Hotel, Jacksonville, Fla.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S. E. Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

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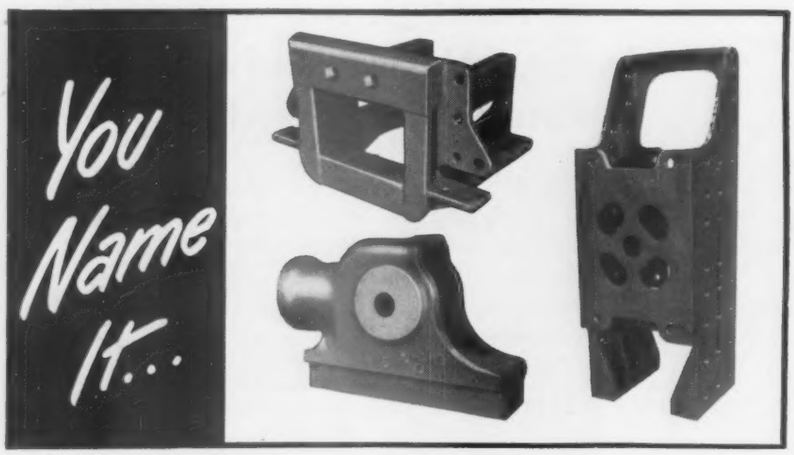
TORONTO RAILWAY CLUB.—D. L. Chambers, P. O. Box 8, Terminal "A", Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q and C Company, 59 E. Van Buren St., Chicago 5, Ill. Exhibit in conjunction with meeting of Roadmasters & Maintenance of Way Association, September 18-20, 1950, The Coliseum, Chicago, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS.—Luther Fritts, 155 West Summit St., Somerville, N. J.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago 1, Ill Meetings scheduled for: October 23, November 20, December 16, 1950, Hotel Sherman, Chicago, Ill.

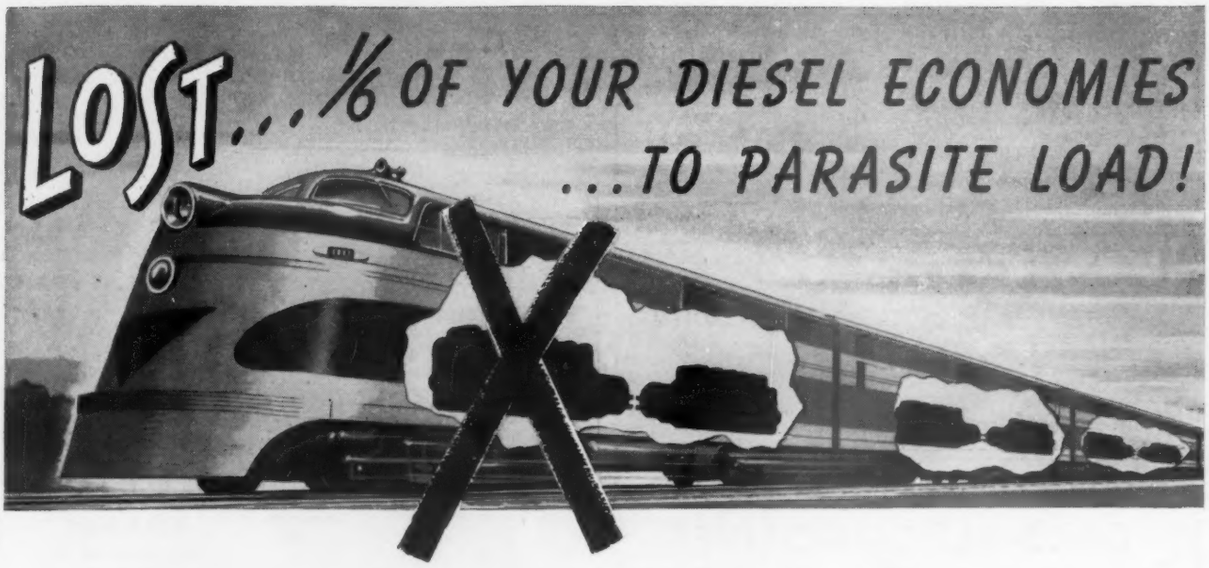
WESTERN ASSOCIATION OF RAILWAY TAX COMMISSIONERS.—A. B. Olson, 210 South Canal St., Chicago, Ill. Regular meetings, first Wednesday of each month, Traffic Club, Palmer House, Chicago, Ill. Semi-annual meeting, September 6, 1950, Lincoln Hotel, Indianapolis, Ind.



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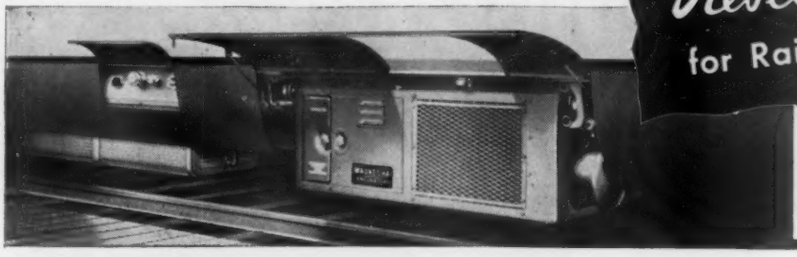
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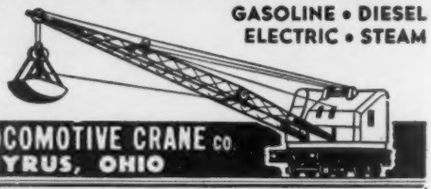
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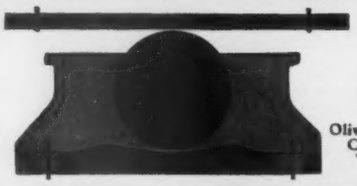
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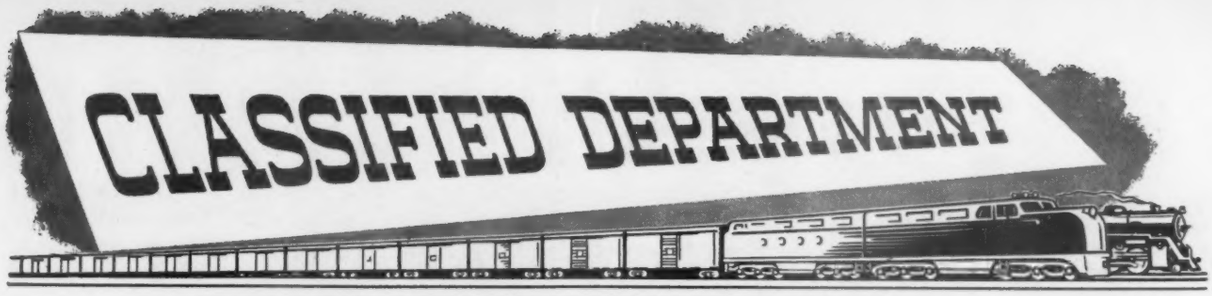
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